

Yuma County *2020 Comprehensive Plan*

Effective March 26, 2012
Includes Amendments through May 5, 2014

Yuma County Board of Supervisors

Lenore Loroña Stuart	District 1
Russell McCloud	District 2
Casey Prochaska	District 3
Marco (Tony) Reyes	District 4
Greg Ferguson	District 5

Yuma County Planning & Zoning Commission

Kenneth Beecher	District 1
Fred Covarrubias	District 1
Paul White	District 2
Max Bardo	District 2
Wayne Briggs	District 3
Michael Henry	District 3
Victor Lozano	District 4
Gary Black	District 4
Angela Moreno	District 5
John McKinley	District 5

Prepared by Yuma County Department of Development Services

Monty Stansbury	Director, Department of Development Services
Paul Melcher	Director, Planning & Zoning Division
Maggie Castro	Planning Manager
John Mahon	Planner III
Juan Leal-Rubio	Planner II
Fernando Villegas	Planner II
Chad Bahr	Planner II
Javier Barraza	Planner II

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Section One—Overview

1.1 Purpose

The Yuma County 2020 Comprehensive Plan, herein after referred to as the “Plan”, is intended to accomplish coordinated, adjusted and harmonious development of the unincorporated area of Yuma County. In accordance with Arizona Revised Statutes 11-804, the Plan was developed so as to conserve the natural resources of Yuma County, to ensure efficient expenditure of public monies and to promote the health, safety, convenience and general welfare of the public. The Plan is the official guide for the development of the unincorporated area of Yuma County.

1.2 Legislative Authority

The *Growing Smarter Act* was Arizona’s first growth management legislation and became effective August 21, 1998. In February 2000, part two of the Growing Smarter Act, *Growing Smarter Plus*, was passed and became effective May 18, 2000. Together, these laws form the basis of planned growth management legislation in the State.

Growing Smarter Plus attempts to address problems associated with growth. The legislation strengthened requirements for county planning. Under Growing Smarter Plus, each Arizona county is required to prepare and adopt a new ten-year comprehensive plan. Consequently, the legislation ensures regulated growth.

1.3 Scope

The Plan addresses a wide variety of countywide characteristics, concerns and issues that the impacts of growth will generate. Central to developing the components of the Plan are the core concepts set forth by the *Growing Smarter* legislation and recommended by the *Growing Smarter* Commission

Yuma County Context:

- Yuma County covers 5,500 square miles
- From 2000 to 2010, Yuma County has experienced a 22.3% increase in population
- Continued growth rates would result in county population increasing from 195,751 residents to a projected 239,451 residents by 2020.

1.4 Plan Organization

The Plan contains eleven elements. The Land Use, Circulation, and Water Resources Elements are required by State law. The Open Space, Recreational Resources, Environmental, Energy, Safety, Cost of Development, Public Participation and Regional Coordination Elements are optional; however, Yuma County has included these elements.

Table 1: Mandated & Optional Elements

Mandated Elements Optional Elements

Land Use	Open Space
Circulation	Recreational Resources
Water Resources	Environmental
	Safety
	Energy
	Cost of Development
	Public Participation
	Regional Coordination

1.5 Plan Utilization

The Plan has wide-ranging applicability. As a whole, it is a document that provides guidance on how the county will address growth and development over the next ten years. Thus, the Plan is to be used for the following:

- **Regulatory Guidelines**—The Plan represents the official adopted guidelines for present and future growth within the unincorporated area of Yuma County. The Plan is used by county staff as a basis for making recommendations and updating the zoning ordinance, regulations, procedures, rezoning, variance and special use permit requests, proposed development projects, subdivision design, Board of Adjustment cases and capital improvement planning.
- **Policy Development**—Provide recommendations to elected and appointed officials and local communities to adopt policies that accommodate projected growth.
- **Establish Planning Focus**—The implementation, attainment and monitoring measures represent desired actions to guide development to achieve better coordinated and planned growth.
- **Assist Development Community**—Provide the development community with useful information to determine acceptable sites for new development, coordinate land uses and increase the predictability of project approval.

1.6 Core Concepts

Public Participation—In updating the Plan, it was understood that uncoordinated and unplanned growth, combined with a lack of common goals, posed a threat to the future quality of life enjoyed by Yuma County residents. Hence, in adopting *Growing Smarter Plus*, broad-based citizen participation was required to ensure the public's interest was incorporated throughout the process. The Plan includes policies, priorities and actions proposed through extensive citizen participation and designed to be representative of county residents.

Yuma County Character—A primary intent of the Plan is to reflect the unique characteristics of the county and to enhance and preserve those qualities. These characteristics include its rural heritage, strategic location, river corridor and a diverse economy supported by bi-national activities including retirement communities, military facilities, government employment and tourism.

Important concepts and high priority items suggested by county residents to provide a framework for the Plan are as follows:

- **Agricultural Lands**—Preserve rural character, encourage the conservation of agricultural lands, and discourage uses that conflict.
- **Transportation**—Encourage efficient and effective transportation systems based on regional priorities and coordinated with county, municipal, State, military and Federal management agencies.
- **Growth Management**—Promote development in areas where adequate public facilities and services exist or could be provided in an efficient manner.
- **Open Space**— Encourage conservation of open space, retention of open space sites and expansion of recreational resources.
- **Property Rights**—Ensure the property rights of landowners are protected.
- **Environmental Resources**—Protect, conserve and enhance environmental resources, access to natural resource lands, air and water quality and availability of water.
- **Economic Development**—Encourage a stable and enduring economic base by planning for adequate land use development.
- **Financial Resources**—Ensure the efficient spending of public funds by analyzing the fiscal impacts of land use decisions.

Section Two—Introduction

2.1 Purpose

The county's annual average population growth over the last decade has been 22.3 percent. If this growth rate remains constant, the character of the county will change in ways that reflect the ongoing urbanization and growth in all communities. This will include demographic changes, increased ethnic and cultural diversity, land use densities, land costs, traffic and a need to preserve the natural environment.

Arizona Department of Economic Security Yuma County Population Projections

- 2020 population 239,451
 - Or 43,700 new residents in ten years
 - Or 4,370 new residents per year
 - Or 364 new residents per month
 - Or 12 persons per day
-

Given the trends and changes occurring in the county, maintaining and/or enhancing the quality of life will require considerable foresight, ongoing cooperative efforts and broad-based planning. Once development occurs, it cannot be easily reversed. The results of the decisions the community makes, or fails to make, will be with us for generations to come. Therefore, it the purpose of the Plan to be a basic document that provides a rational decision making framework to aid in these decisions.

2.2 Evolution of the Plan

The Plan is written to fulfill mandates of the State and the Growing Smarter legislation. The *Yuma County 2020 Comprehensive Plan* provides an updated foundation for long term growth and development in the county. The *Yuma County 2010 Comprehensive Plan* was adopted by the Board of Supervisors December 10, 2001. Arizona Revised Statutes §11-824B states as follows: “A county comprehensive plan, with any amendments, is effective for up to ten years from the date the plan was initially adopted or until the plan is readopted or a new plan is adopted pursuant to this subsection and becomes effective. On or before the tenth anniversary of the plan’s most recent adoption, the board shall either readopt the existing plan for an additional term of up to ten years or shall adopt a new county plan as provided by this article.”

The county was divided into Development Study Areas (DSAs) to handle the organization, allocation of resources and writing of the Plan. Ten of Development Study Areas Background Studies and Community Assessments were completed to provide a base of information for the development of the Plan.

Introduction

The Plan further evolved through a series of public participation efforts conducted from the kick-off of the Plan's update that started with the creation of Citizen Advisory Groups (CAGs) from the first annual meeting held on November 16, 2006 in the Dome Valley/Wellton Planning Area. The last CAG meeting took place on May 25, 2011.

2.3 Public Participation Approach

Public participation was the single-most vital element in the creation of the *Yuma County 2020 Comprehensive Plan*. Multiple public meetings were held by Planning staff at locations all across the County at which the Plan was discussed. The Plan was structured around extensive citizen involvement in implementing Growing Smarter legislation. The Public Information/Public Participation (PI/PP) Program was a central focus to the overall efforts and was designed and coordinated in order to ensure the broadest possible base of citizen and group involvement. The Plan was then written to incorporate the needs, desires and issues county citizens felt are important and articulate the different visions expressed regarding growth and development.

Citizen Advisory Groups (CAGs) were fundamental to the public involvement component of the planning process. In the initial phase of the PI/PP, CAGs were formed for the designated planning areas. These CAGs met a number of times and were involved in a variety of tasks and exercises. This involved defining policies and priorities for their area and expressing concerns and opinions relative to the general content of the Plan. The results are contained within the final report written for each CAG. These reports, as well as all other supporting documents, are available upon request or on the Yuma County website at www.yumacountyaz.gov.

2.4 Designated Planning Areas

The county was divided into nine planning areas for analysis of county resources and growth trends. Additionally, as part of the Plan update, seven Citizen Advisory Group Studies were written to provide a base of information and an in-depth understanding of existing conditions and future development and infrastructure needs for each one of the planning areas.

These Planning Areas include the following:

- 1) North Gila
- 2) Yuma Mesa
- 3) Northwest Yuma
- 4) Gila Valley
- 5) Foothills
- 6) Yuma Valley
- 7) Martinez Lake
- 8) Dome Valley/Wellton
- 9) Dateland/East County

Introduction

Planning Area Descriptions: The nine geographically assigned Planning Areas are described as follows: (*Refer to the Land Use Element for detailed maps of each planning area.*)

- 1. North Gila Planning Area:** The North Gila Planning Area is comprised of the area roughly bounded by California to the west, Yuma Proving Ground and the Gila Mountains to the east, Levee Road to the south and Imperial Dam to the north. The planning area is almost exclusively located in the Colorado and Gila River valley. The confluence of the Colorado and Gila Rivers is located along the southern boundary of the planning area.
- 2. Yuma Mesa Planning Area:** The Yuma Mesa Planning Area is comprised of the unincorporated portion of Yuma County that is roughly bounded by the East Main Canal and a small portion of the City of Somerton to the west, the Barry M. Goldwater Range and City of Yuma to the east, the City of San Luis and Mexico to the south and Interstate 8 and MCAS-Yuma to the north. A portion of the Cocopah Reservation is located within the planning area; however, it is part of a sovereign nation and not under the land use planning jurisdiction of Yuma County.
- 3. Northwest Yuma Planning Area:** The Northwest Yuma Planning Area is comprised of the unincorporated portion of Yuma County that is roughly bounded by Avenue D to the west, the City of Yuma to the south and east and the West Main Canal and 1st Street to the north.
- 4. Gila Valley Planning Area:** The Gila Valley Planning Area is comprised of the area roughly bounded by Pacific Avenue to the west, Fortuna Wash to the east, Levee Road to the north and the City of Yuma to the south. The planning area is almost exclusively located in the Colorado and Gila River valleys. The confluence of the Colorado and Gila Rivers is located along the northern boundary of the planning area.
- 5. Foothills Planning Area:** The Foothills Planning Area is comprised of the unincorporated portion of Yuma County that is roughly bounded by the City of Yuma to the west, the crest of the Gila Mountains to the east, the Barry M. Goldwater Range to the south and the Gila Gravity Main Canal and County 9th Street to the north. Fortuna Wash, which runs in a northeasterly direction, more or less bisects the planning area.
- 6. Yuma Valley Planning Area:** The Yuma Valley Planning Area is comprised of the unincorporated portion of Yuma County that is roughly bounded by Mexico to the west, the City of Yuma, Avenue D, the City of Somerton and the East Main Canal to the east, the City of San Luis to the south and California to the north. The planning area is located in the Yuma Valley close to the Colorado River.
- 7. Martinez Lake Planning Area:** The Martinez Lake Planning Area is comprised of two geographically separate areas that can be roughly defined as the portion of Yuma County that is located north of Imperial Dam and west of Yuma Proving Ground and the Kofa National Wildlife Refuge. The topography of the southern portion of the planning area is dominated by the Colorado River and Martinez Lake which forms the western boundary of the planning area and the County. Development in this area centers around the Martinez Lake shoreline. The northern portion of the Martinez Lake Planning Area is a sliver of land located between the La Paz County line and the Kofa Mountains and the Kofa National Wildlife Refuge.

Introduction

- 8. Dome Valley/Wellton Area:** The Dome Valley/Wellton Planning Area is comprised of the unincorporated portion of Yuma County that is roughly bounded by the crest of the Gila Mountains to the west, the Barry M. Goldwater Range to the south, the crest of the Mohawk Mountains to the east and Yuma Proving Ground to the north. The Gila River runs from east to west, bisecting the planning area.
- 9. Dateland/East County Planning Area:** The Dateland/East County Planning Area is comprised of the unincorporated portion of Yuma County that is roughly bounded by the crest of the Mohawk Mountains and Yuma Proving Ground to the west, the Barry M. Goldwater Range to the south, Maricopa County to the east and La Paz County to the north. The Gila River runs from east to west bisecting the planning area. The Eagle Tail Mountains Wilderness Area covers 12 square miles. This area is managed by the Bureau of Land Management in a manner that minimizes as much as possible human impact on the land.

Section Three—Land Use Element

The Land Use Element provides guidance for future growth and any potential changes to land use patterns in unincorporated Yuma County. The Land Use Element can be divided into three major components.

The first component details existing and projected demographics and examines existing land use patterns in unincorporated Yuma County. A special emphasis is placed on agricultural and military activities because, in addition to being the two most important segments of the Yuma County economy, 47% of nonmilitary land in unincorporated Yuma County is being used for agricultural purposes, and a further 29% is being used as federal wildlife refuges, leaving 29% or 1,542 square miles (an area comparable in size to the state of Rhode Island) available for other types of land use.

The second component contains land use designations and a set of maps depicting how all land under the planning jurisdiction of Yuma County is designated. Each land use designation contains the allowed uses and densities that are desired on land with that designation. All lands under the planning jurisdiction of Yuma County have been assigned a land use designation.

The third component covers the amendment process and criteria. Changing circumstances can lead to a need and/or desire to make specific changes to a land use plan and the maps by which it is implemented. For this reason, the land use designation maps contained within the Yuma County 2020 Comprehensive Plan can be altered through the major or minor amendment process. When an amendment to change a land use designation map is submitted, it is judged on criteria contained in *Section 3.3* to determine if the proposed change is an improvement to the land use pattern and will help achieve the goals and objectives of the 2020 Comprehensive Plan.

The Land Use Element is comprised of three sections:

Section 3.1: Demographics and Existing Land Use Patterns

- Estimated year-by-year population change from 2001 to 2009
- Building permit trends from 2000 to 2010
- Population projections from 2011 to 2020
- Projected housing units needed from 2011 to 2020
- Land ownership patterns
- Military land use
- Agricultural land use
- Planning areas
- Profile of each planning area detailing its demographics and land use patterns

Section 3.2: Land Use Designations

- Definition of twenty one land use designations containing the allowed uses and densities
- A detailed set of maps that show the land use designation of all land under the land use planning jurisdiction of Yuma County

Section 3.3: Amendment Process and Criteria

- Major/minor amendment definition
- Major amendment process
- Minor amendment process
- Criteria for amending the land use maps

3.1 Demographics and Existing Land Use Patterns

The past decade (2001 to 2010) has seen two distinct trends in the annual population growth rate. In the first half of the decade there were nearly uninterrupted increases in the annual population growth rate for both Yuma County as a whole and unincorporated Yuma County. The annual population growth rate peaked in 2005 at nearly 4%. The second half of the decade saw the real estate bubble burst, housing prices decline and a major recession. These were likely major factors in the population growth rate slowing every year after 2005. By 2009 the annual growth rate for unincorporated Yuma County had declined to 0.31% per year.

Population growth has two components. The first is natural increase, which is the rate at which the number of births to Yuma County residents exceeds the number of deaths of Yuma County residents. In Yuma County both numbers of births and deaths, as reported to the Arizona Department of Health Services, have held remarkably stable over the past decade with almost no variation between years. In a typical year between 2002 and 2009, the rate of natural increase for Yuma County is approximately 2,000 people.

The second component of population change is the net migration rate, or the number of people moving into and out of Yuma County. Unlike births and deaths for which comprehensive statistics are available, net migration has to be estimated. This is done by taking the overall estimate of population change calculated by the Arizona Department of Commerce and subtracting out portions which can be attributed to births and deaths. What is left over is the net migration rate. For all years 2002 through 2009, the net migration rate for Yuma County was positive, meaning for all years more people moved in than moved out. However, the annual net migration rate into Yuma County fluctuated greatly between 2002 and 2008. Between 2002 and 2005 it grew greatly, peaking in 2005 with about 5,000 more people moving into Yuma County than moving out. As economic conditions deteriorated in 2007, the net migration rate declined dramatically. In 2008 and 2009 only about 300 more people moved into Yuma County than moved out.

Building Permit Trends

Between 2000 and the end of 2010, Yuma County issued 7,964 housing unit building/placement permits. Of these, 4,861 were building permits for new site built single family homes. All of these represent additions to the housing stock of unincorporated Yuma County. Yuma County issued 2,824 placement permits for manufactured homes. It is unclear what percentage of these manufactured homes represent additional housing or were replacements for existing manufactured housing as Yuma County does not regulate or track the removal of manufactured or mobile homes. There were 279 placement permits issued for mobile homes which are defined as structures built on or prior to June 15, 1976 on a permanent chassis.

The Foothills Planning Area was the center of residential growth in unincorporated Yuma County. Approximately 77% of the permits issued for additional housing units were in the Foothills Planning Area. The next most active planning area in terms of growth was the Yuma Mesa Planning Area, accounting for about 10% of added housing units. The remaining 10% was split between the seven other planning areas with the Northwest Yuma Planning Area accounting for 4.2% of the total.

Unincorporated Yuma County saw three very different trends in the rate at which housing units were added between 2000 and 2010. From the beginning of 2000 through the third quarter of 2003, there was nearly steady growth in the number of housing units added. The rate at which housing units were added stayed relatively high and steady through the first quarter of 2006. From this point on the rate at which housing units were added declined steeply at first then leveled off some time around the third quarter of 2007 and remained the same for the rest of the decade. Between 2006 and 2010, 14 out of 16 quarters saw a decline in the number of housing units added. The initial decline was likely caused by an issue regarding sewer capacity in the areas of highest growth.

Land Use Element

Population Estimates

	2001	2002	2003	2004	2005	2006	2007	2008	2009
San Luis	16,846	17,688	18,838	20,158	21,488	22,351	23,680	24,654	25,682
City of Yuma	79,699	80,975	81,944	83,315	85,352	87,180	88,664	89,842	91,105
Somerton	7,973	8,225	8,660	9,110	9,944	10,600	11,057	12,146	12,754
Wellton	1,869	1,876	1,879	1,896	1,900	1,908	1,908	1,921	1,951
Unincorporated Yuma County	56,780	57,307	57,976	59,521	61,510	63,228	63,872	64,736	65,480
All of Yuma County	163,167	166,071	169,297	174,000	180,194	185,267	189,181	193,299	196,972

Table 1: Population by Year and Jurisdiction¹

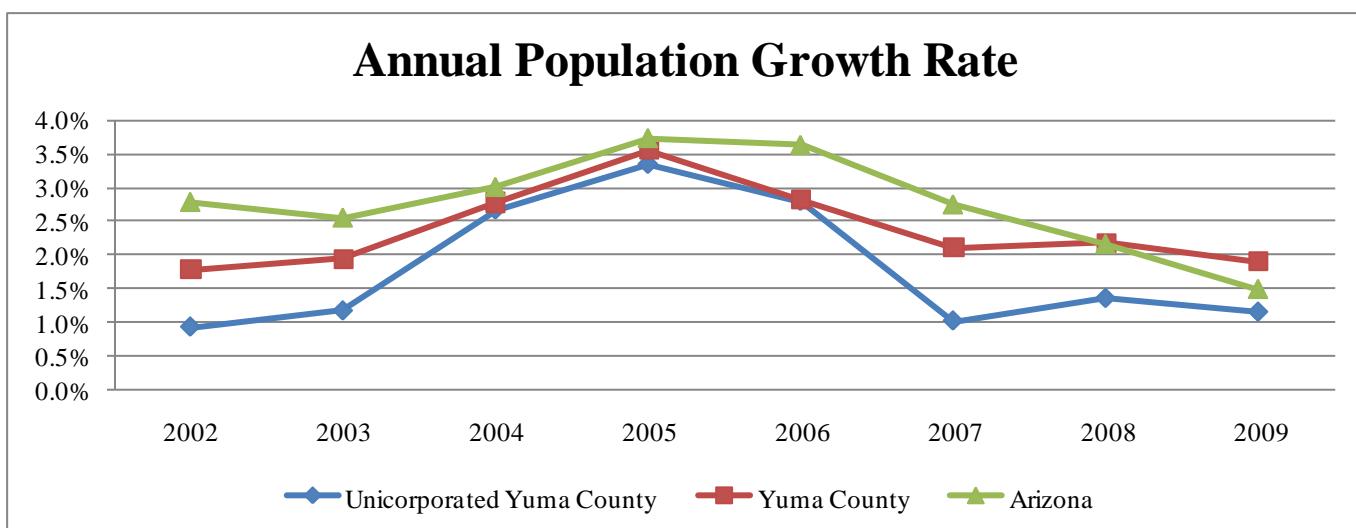


Figure 1: Annual Population Growth Rate¹

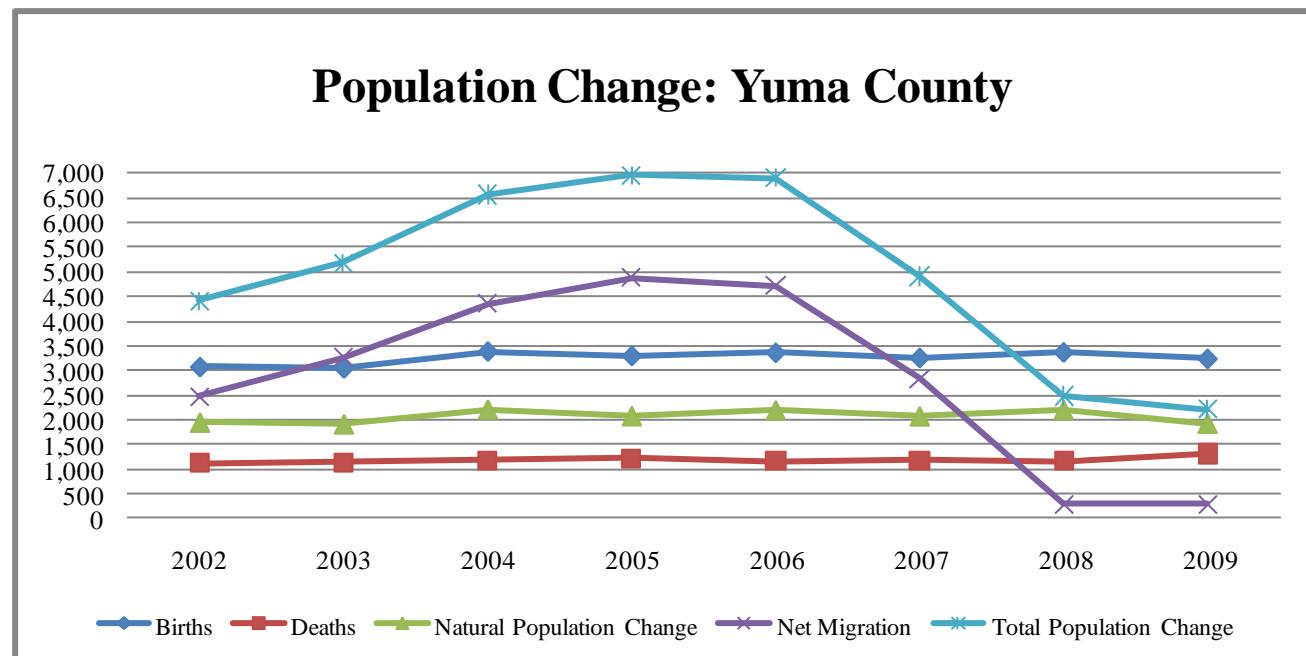


Figure 2: Population Change Factors 2002 through 2009¹

¹ U.S Census estimates

Land Use Element

Planning Area	Single Family Site Built	Manufactured Home	Mobile Home	Total Housing Units				
Foothills	3,976	65.2%	2,056	33.7%	66	1.1%	6,098	76.6%
Dome Valley/Wellton	63	29.7%	124	58.5%	25	11.8%	212	2.7%
Dateland/East County	6	5.9%	70	68.6%	26	25.5%	102	1.3%
Yuma Mesa	620	75.6%	165	20.1%	35	4.3%	820	10.3%
Yuma Valley	56	47.1%	45	37.8%	18	15.1%	119	1.5%
North Gila	4	9.3%	36	83.7%	3	7.0%	43	0.5%
Gila Valley	14	6.9%	164	80.8%	25	12.3%	203	2.5%
Martinez Lake	24	80.0%	6	20.0%	0	0.0%	30	0.4%
Northwest Yuma	98	29.1%	158	46.9%	81	24.0%	337	4.2%
Total	4,861	61.0%	2,824	35.5%	279	3.5%	7,964	100.0%

Table 2: Housing Units Added by Type and Planning Area from 2000 through 2010

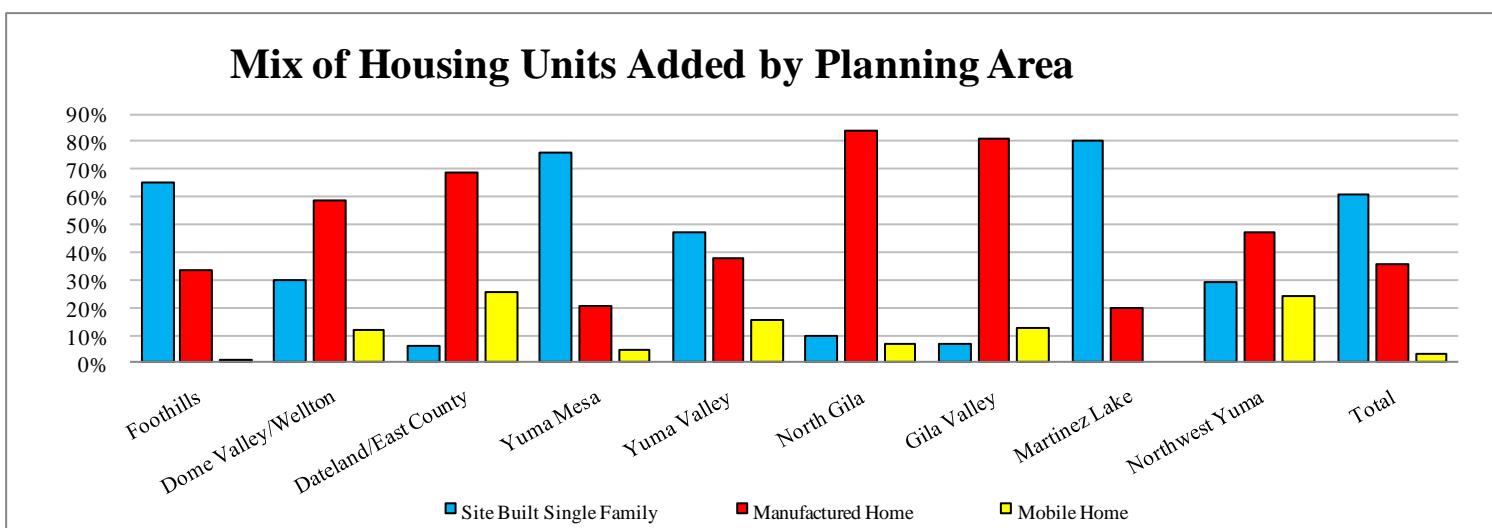


Figure 3: Mix of Housing Units Added by Planning Area from 2000 through 2010

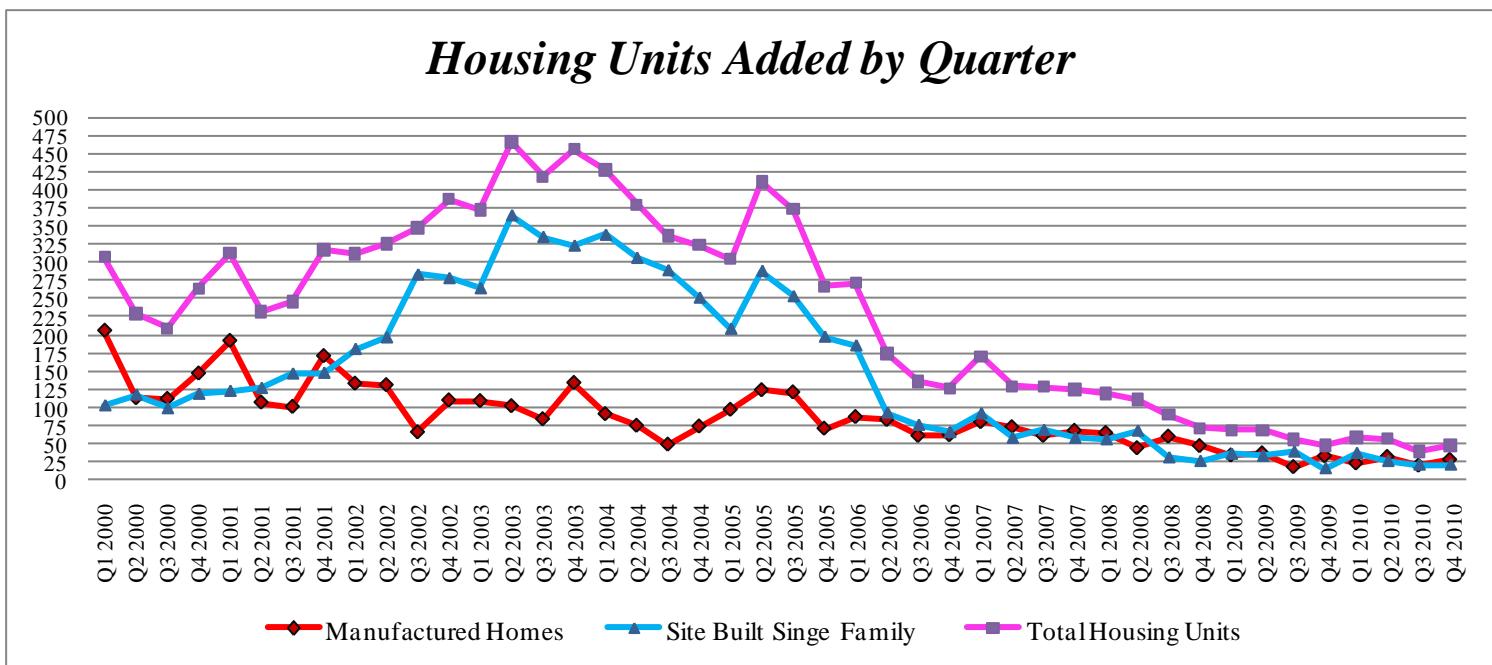


Figure 4: Mix of Housing Units Added by Quarter

<i>Growth Scenario</i>	Projected Change From 2010 Levels in Population and Housing							
	2012		2015		2018		2020	
	<i>People</i>	<i>Housing Units</i>	<i>People</i>	<i>Housing Units</i>	<i>People</i>	<i>Housing Units</i>	<i>People</i>	<i>Housing Units</i>
Matches 2007 through 2009, 0.3% Annual Growth Rate	421	240	1,058	603	1,700	969	2,131	1,215
Matches 2002 through 2006, 3.36% Annual Growth Rate	4,935	2,813	12,976	7,397	21,856	12,458	28,284	16,122
Matches 2001 through 2009, 2.24% Annual Growth Rate	3,236	1,845	8,368	4,770	13,852	7,896	17,716	10,098
Recovery Begins in 2010	4,330	2,468	11,324	6,455	18,966	10,811	24,451	13,937
Recovery Begins in 2011	3,366	1,918	10,177	5,801	17,619	10,043	22,960	13,087
Recovery Begins in 2012	1,440	821	8,073	4,601	15,320	8,732	20,521	11,697
Recovery Begins in 2013	421	240	6,024	3,434	13,081	7,456	18,146	10,343
Recovery Begins in 2014	421	240	4,029	2,296	10,901	6,214	15,833	9,025
Recovery Begins in 2015	421	240	2,086	1,189	8,778	5,004	13,581	7,741
Recovery Begins in 2016	421	240	1,058	603	6,711	3,825	11,388	6,491
Recovery Begins in 2017	421	240	1,058	603	4,698	2,678	9,252	5,274
Recovery Begins in 2018	421	240	1,058	603	2,738	1,560	7,172	4,088
Recovery Begins in 2019	421	240	1,058	603	1,700	969	5,147	2,934
Recovery Begins in 2020	421	240	1,058	603	1,700	969	3,175	1,810

Table 3: Projected Gains in Population and Housing Units in Unincorporated Yuma County Under Different Growth Scenarios

In order to better plan for future changes in land use patterns, it is important to understand what type of changes in population and resulting changes in the number of housing units are most likely to occur during the period of time covered by this plan. Table 3 provides projected changes in population from their 2010 levels for 2012, 2015, 2018 and 2020 based on various growth scenarios.

The bursting of the housing bubble and the beginning of the recession in 2007 has dramatically reduced population and housing unit growth. Historically, growth in both unincorporated Yuma County and Yuma County has been both robust and reasonably predictable. Between 1980 and 2000, the average annual growth rate for Yuma County was 3.84%.

Uncertainty in regard to when Yuma County will return to its historical growth patterns makes it very difficult to project population and housing unit growth for the years 2010 through 2020. To account for this, the above table projects population and housing growth for a number of different growth scenarios that vary based on what year historical growth patterns resume. Projecting growth in this manner allows for a range of expected growth under the most optimistic and most pessimistic conditions that can be established. An increase of about 24,000 people and 14,000 housing units would be expected by the end of 2020 were historical growth patterns to resume in 2010. If historical growth patterns do not resume until the year 2020, a population increase of about 3,000 people and 1,800 housing units would be expected by the end of 2020. If the assumption is made that the historical growth patterns return to a growth rate more in line with historical norms sometime between 2011 and 2015, the range of expected growth shrinks to an increase of about 23,000 to 13,000 people and 13,000 to 8,000 housing units by the end of 2020.

Land Ownership Patterns

In unincorporated Yuma County there are approximately 472 square miles of privately owned land. This is the area under the direct land use planning jurisdiction of Yuma County and is home to approximately 70,000 people and nearly all of Yuma County's agricultural industry. There is a perception that because only 8.88% of unincorporated Yuma County is privately owned that there is a shortage of developable land. The low percentage of privately owned land in unincorporated Yuma County is more a factor resulting from the presence of two large national wildlife refuges and two large military installations than of a lack of privately held land. The 472 square miles of privately owned land, while small when compared to the overall size of unincorporated Yuma County, is nonetheless a large area of land. It is exactly equal in size, for example, to the City of Los Angeles. This does not even take into account the significant amount of privately held land located within the incorporated areas of Yuma County.

The State of Arizona owns 5.98%² of the land in unincorporated Yuma County with the overwhelming majority of this being state trust land. State trust lands are managed by the Arizona State Land Department which is mandated to achieve the highest and best use of the land in order to maximize revenues to the trust's beneficiaries. For state trust lands to be available an interested party must apply for a parcel to be put up for auction. If the State Land Department feels that an auction at that time is the best way to maximize revenue from that parcel, a public auction is then held. Historically, state trust lands have been an important source of developable lands. For example, Martinez Lake and much of the Foothills were originally state trust land. This trend is likely to continue as large areas of state trust land remain in the portions of Yuma County that have been experiencing the most development.

Type of Land Ownership or Management	Acres	Square Miles
State of Arizona	203,399	317.8
Indian Reservations	8,063	12.6
Bureau of Land Management	341,581	533.7
Cabeza Prieta National Wildlife Refuge	449,530	702.4
Kofa National Wildlife Refuge	527,316	823.9
Yuma Proving Ground	448,244	700.4
Barry M. Goldwater Range	928,263	1,450.4
Private Land	302,254	472.3
<i>Total Unincorporated Yuma County</i>	<i>3,403,938</i>	<i>5,318.7</i>

Table 4: Land Ownership in Unincorporated Yuma County

²Does not include the approximately 305 square miles of land titled to the State of Arizona that are located within the boundaries of Kofa National Wildlife Refuge, Yuma Proving Ground and Barry M. Goldwater Ranges that are managed as part of these entities.

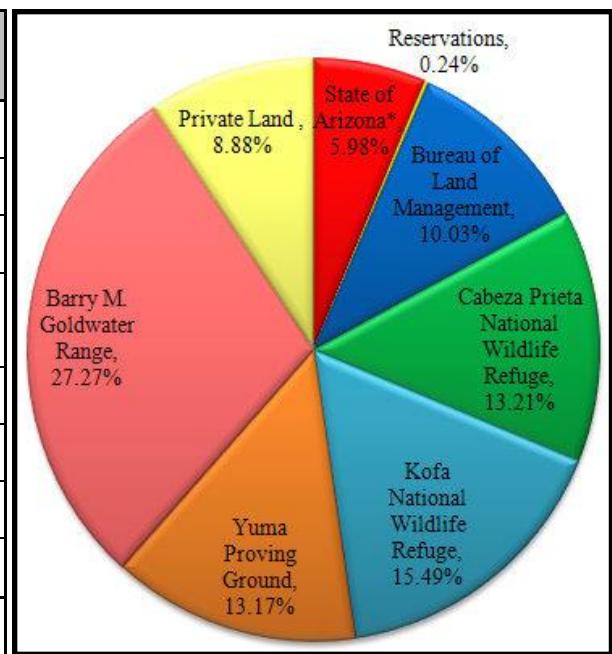


Figure 5: Land Ownership in Unincorporated Yuma County

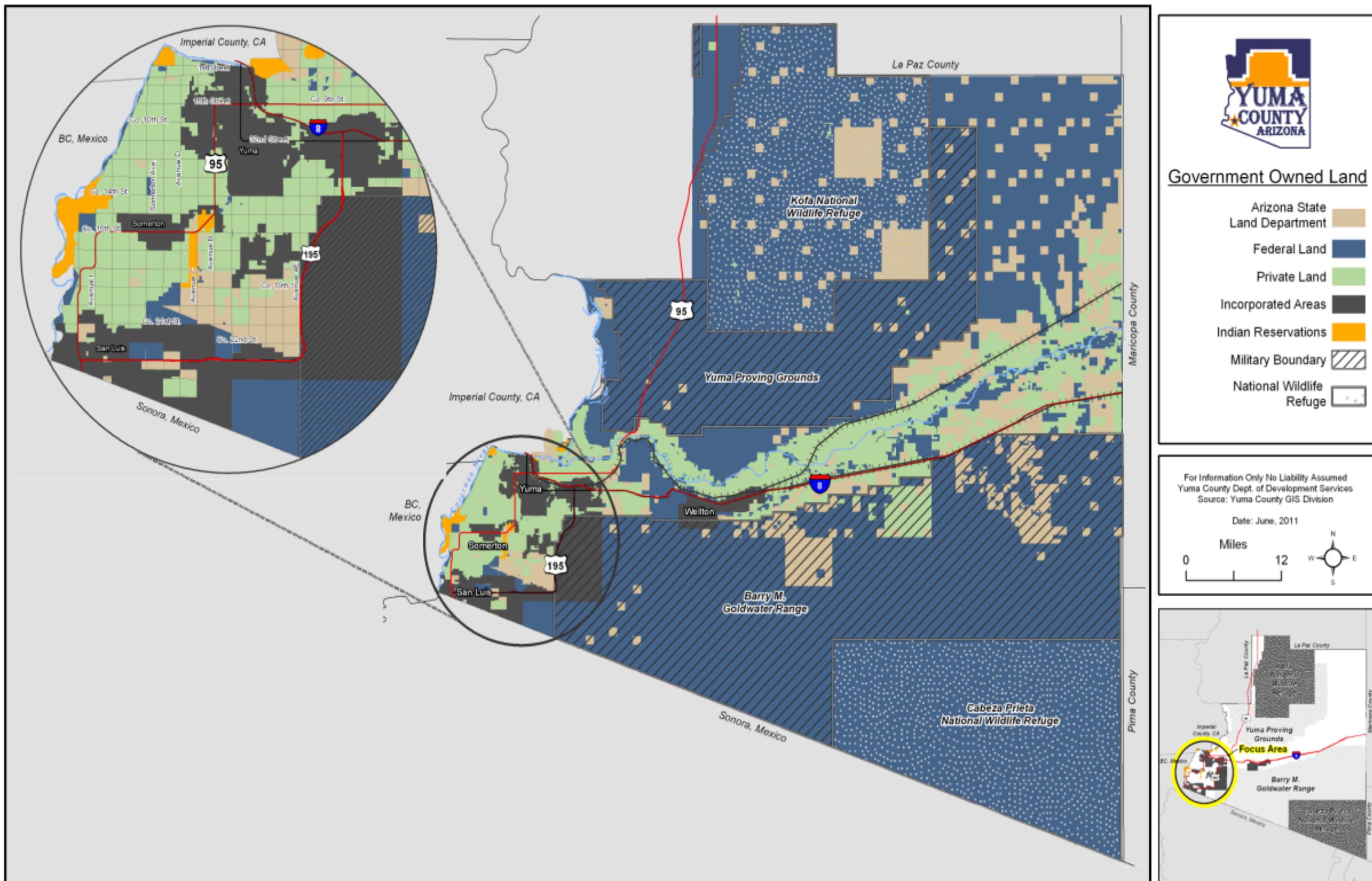
Having a greater effect on county development is the federal government, which owns approximately 80% of land in Yuma County. Most of this land is part of four entities with a specific mission and land use: Yuma Proving Ground, Barry M. Goldwater Range, Kofa and Cabeza Prieta National Wildlife Refuges. Almost all of the remaining 341,581 acres are managed by the Bureau of Land Management (BLM). The BLM's plan on how this land is to be used is contained in the *Yuma Field Office Approved Resource Management Plan* which was approved in January 2010.

Industrial and Commercial

It is important the county industrial and commercial needs are supported by appropriate land use designations. The existing industrial and commercial land uses reflect the county's strategic location in relation to the Interstate 8 (I-8) corridor, MCAS-Yuma, and Mexico. Over two-thirds of the land currently designated as Industrial is located in the western portion of the county, primarily along Highway 95, Area Service Highway, and the I-8 corridor. Immediately south of MCAS-Yuma, there is a large area designated Agriculture/Industrial primarily intended to allow continued agricultural uses, site built residences with noise attenuation , and aviation-compatible industrial uses subject to the demonstration and completion of the appropriate public infrastructure, public services and long term water allocation needed for development.

Existing commercial land uses reflect a combination of strip and cluster development. Most commercial establishments are located within the vicinity of residential areas and are adjacent to arterial roads and major intersections. An example is the large tracts of commercial land currently located along I-8 on the North and South Frontage Roads around Foothills Boulevard and Fortuna Road.

Land Use Element - Land Ownership



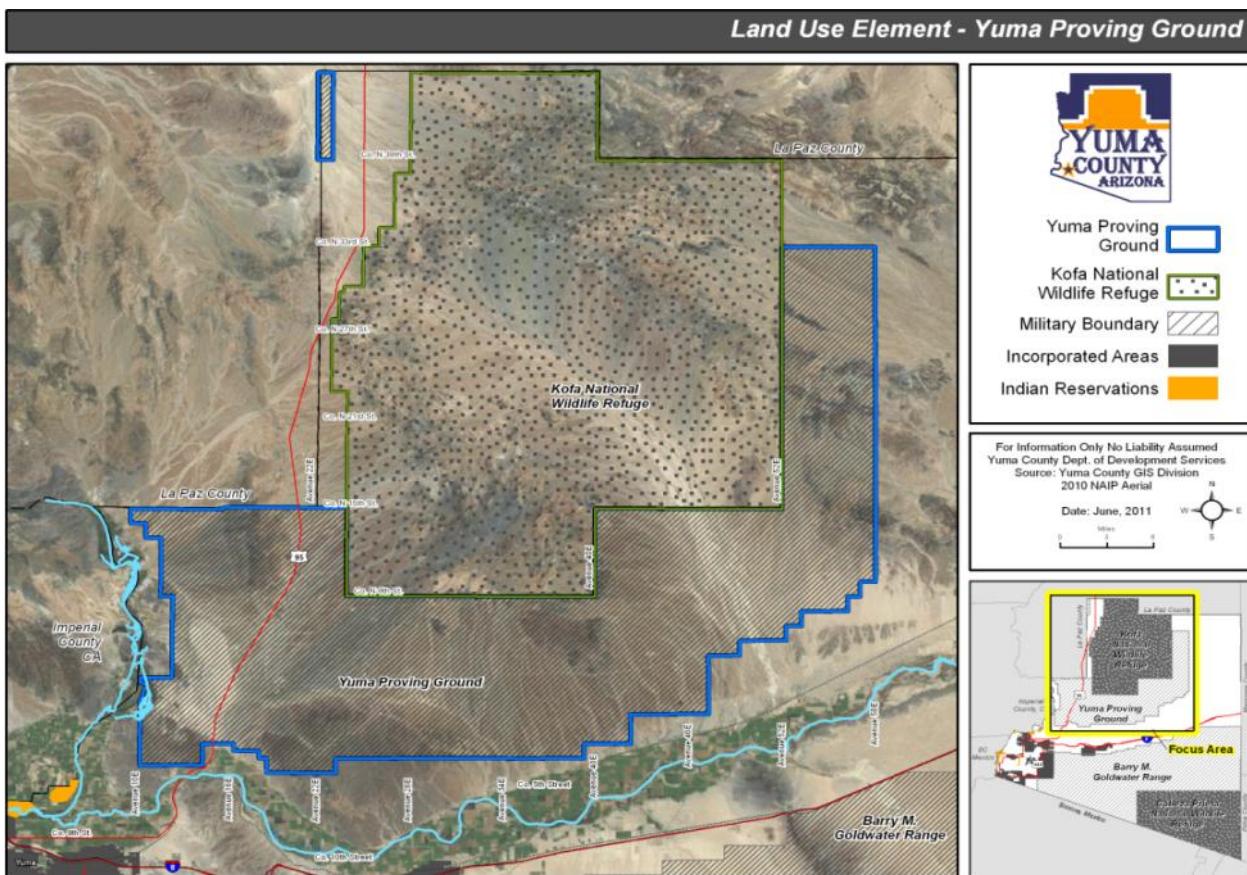
Map 1: Government Land in Eastern Yuma County

Yuma Proving Ground

Yuma Proving Ground (YPG) is a large test facility for the U.S. Army and is located in the northwest portion of Yuma County. YPG is one of the largest military installations in the world covering approximately 700 square miles of Yuma County as well as an additional 600 square miles in neighboring La Paz County. YPG provides a site for the Army to test things such as long range artillery, missile firing aircraft, cargo and personnel parachutes, direct fire weapons, unmanned aerial systems, and technologies to defeat roadside bombs. YPG also serves as a location for training with 9,000 to 10,000 soldiers and marines conducting training at YPG each year.

Yuma Proving Ground is a vital component of the Yuma County economy. YPG is the largest single employer in Yuma County employing approximately 3,000 civilian and military employees. Approximately 450 employees reside in housing located within YPG. Additionally, approximately 23,000 people visit YPG annually to conduct testing and training activities. The overall economic impact of YPG on the Yuma County economy is estimated to be about \$425 million annually.

In July 2009, General Motors opened a new \$120 million hot weather vehicle testing facility on a 2,400 acre site located within YPG as a replacement for a facility in Mesa, Arizona. In exchange for allowing General Motors to lease the site, the Army has gained access to the 40 miles of test track and roads that General Motors constructed at the site, enhancing the test capabilities of YPG. General Motors employs about 75 people at this site.



Marine Corps Air Station-Yuma

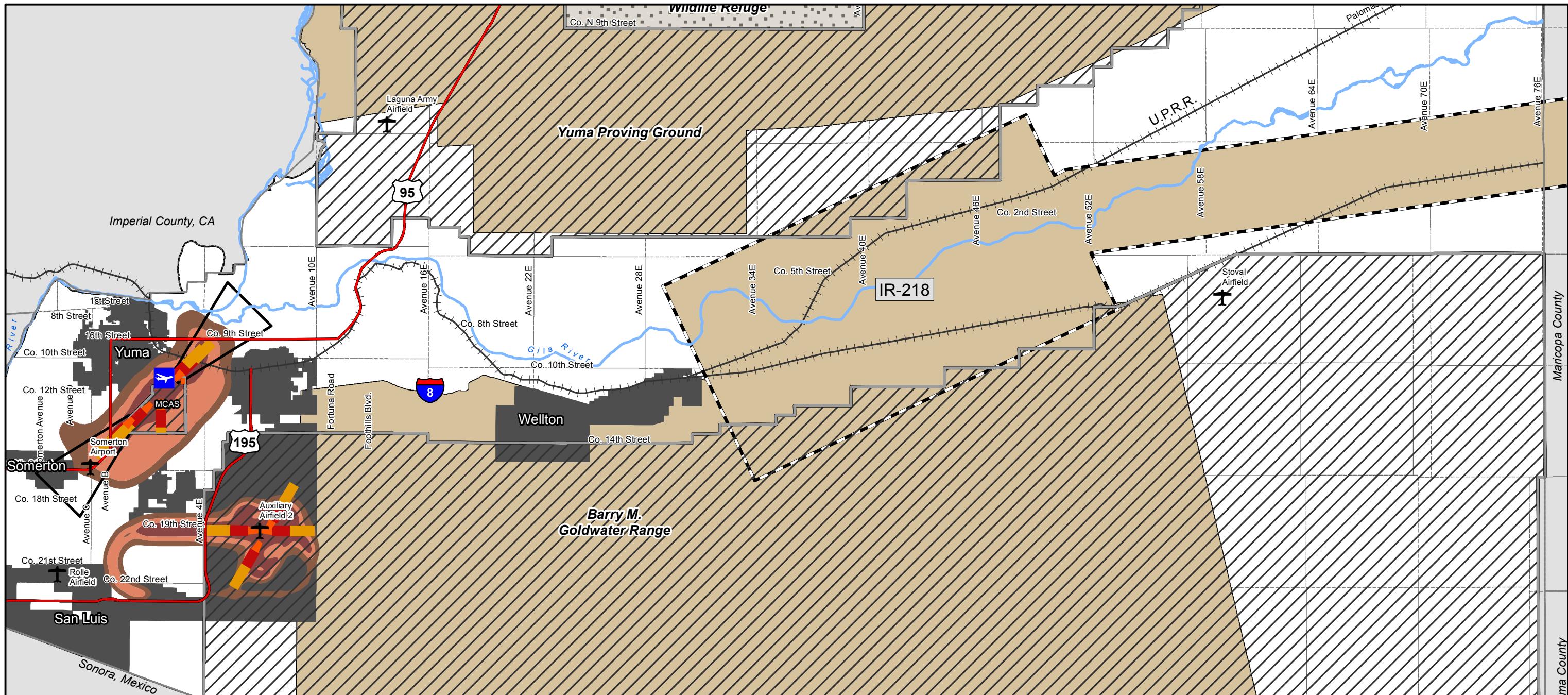
Marine Corps Air Station (MCAS)-Yuma covers 7.58 square miles within the City of Yuma. The site of MCAS was first used as an airfield in 1928. In 1943 it became an Army Air Base and after several more transfers of control it became a Marine Corps Air Station in 1959. The primary function of MCAS is to serve as home to Marine Aircraft Group-13 which is comprised of four squadrons of AV-8B Harriers, an aviation logistics squadron and is an aviation training installation for 80% of the Marine Corps aviation training. In 2010, 4,249 military personnel were stationed at MCAS, 6,777 family members of military personnel based at MCAS were present in Yuma County and 1,877 civilians were employed at MCAS. MCAS Yuma is the busiest airfield in the Marine Corps with approximately 211,000 airfield operations in 2010. The total economic impact of MCAS on the Yuma County economy was calculated to be \$485 million in 2010.³

The state legislature has adopted legislation governing land use in the vicinity of military installations because it recognizes the importance of military aviation to the state economy and how incompatible land uses in the vicinity of military airports endangers lives. The types of land uses allowed on land located within the defined noise zones and/or accident potential zones of MCAS and Auxiliary Field #2 (Aux-2), as referred to in A.R.S. §28-8461, have significant restrictions under A.R.S. §28-8481 in order to keep land uses in the vicinity of military airports compatible with the continued operations of these facilities. In these areas urban style residential development is prohibited and commercial and industrial development must be aviation compatible. These regulations are also designed to protect the safety of the public by keeping residences out of areas put at risk by airport operations. The June 15, 2005 crash of a bomb laden Marine AV-8B harrier jet into the backyard of a home located in Accident Potential Zone-1 illustrates the risk associated with these areas. These restrictions can be found in Article VII of the Yuma County Zoning Ordinance. Additionally, A.R.S. §28-8481 requires a major amendment for any change to the Comprehensive Plan that would increase residential density or allow for certain non-compatible land uses within any of the noise zones or accident potential zones.

It is the position of the Attorney General that pursuant to A.R.S. § 28-8481(F) and (P) and Attorney General Opinion No. I08-003, no new residential development within a high noise or accident potential zone is allowed unless the subject property had a building permit issued, had a residence constructed, or was approved for residential development under the terms and conditions of a development plan prior to December 31, 2004. land that was zoned, but upon which one of the above criteria was not met prior to December 31, 2004, is not exempt from the requirements of A.R.S. § 28-8481 and thus Yuma County will not approve any new residential construction within these zones.

³Marine Corps Air Station Yuma 2010 Statistical Summary

Land Use Element - Marine Corps Air Station Yuma Regulatory Areas



Airfields

- Yuma International Airport
- Airfields
- Clear Zones
- APZ I
- APZ II
- High Noise or Accident Potential Zone

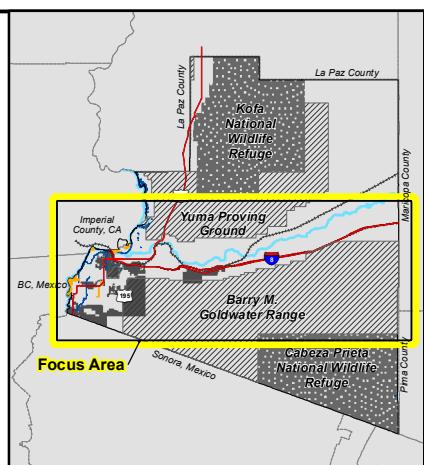
- Military Boundary
- Marine Corps Air Station Yuma
- Instrument Route 218

- | |
|--------------------------|
| 65 dB |
| 70 dB |
| 75 dB |
| Incorporated Areas |
| National Wildlife Refuge |
| Restricted Airspace |

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Yuma County Dept. of Development Services
Source: Yuma County GIS Division

Date: February, 2013

0 Miles
W S E N



*Single family residential development is restricted pursuant to the Comprehensive Plan, Land Use Element

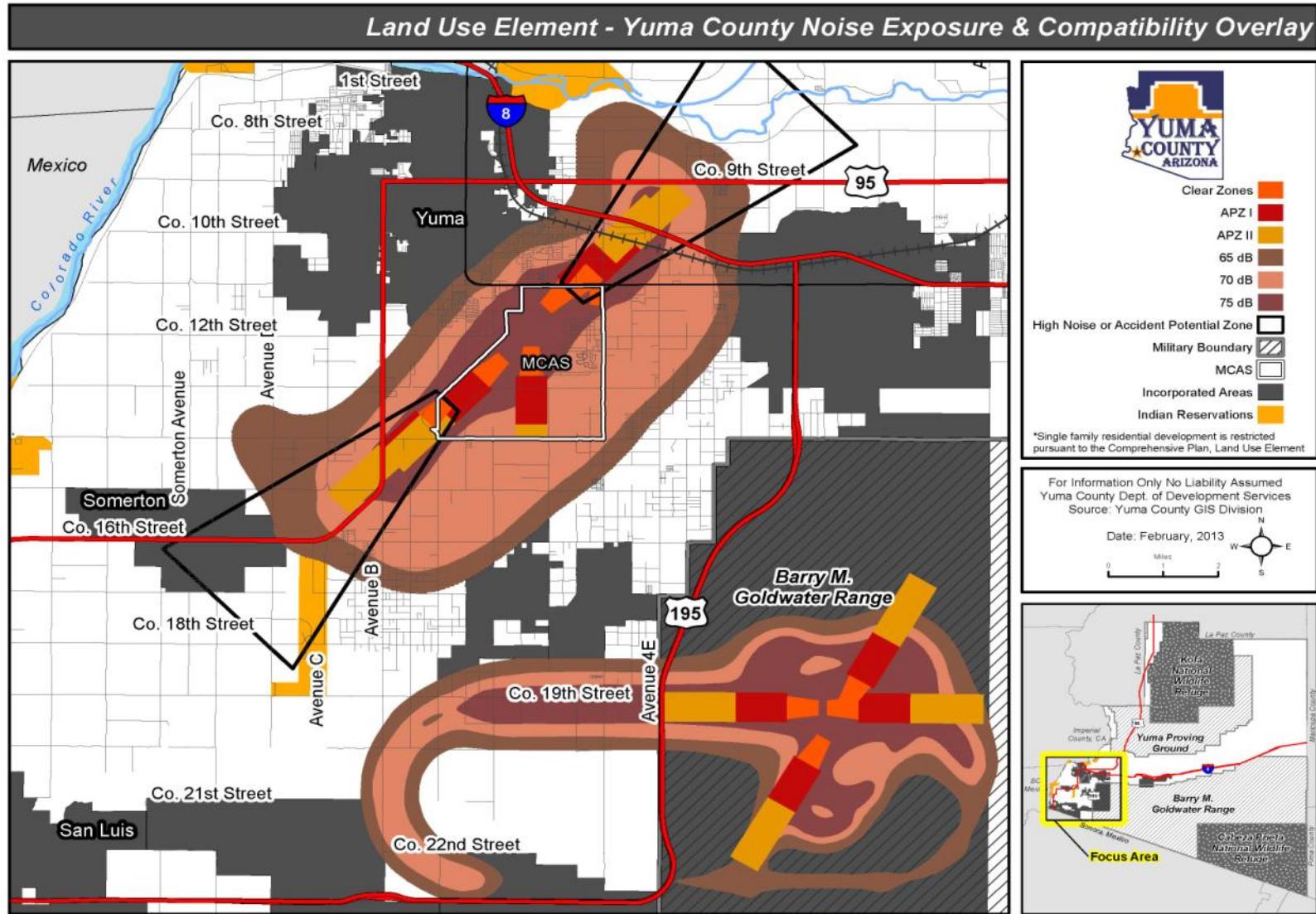
Map 3: MCAS-Yuma Regulatory Areas

Yuma County 2020 Comprehensive Plan

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Land Use Element

Map 3.1 Noise and Compatibility Overlay



Barry M. Goldwater Range

The Barry M. Goldwater Range (BMGR), established in 1941 spans 184,242,423 acres in Yuma, Maricopa and Pima Counties. It is the nation's second largest military reservation with 928,263 acres of it located in unincorporated Yuma County. The BMGR is split between the Marine Corps (the portion west of the Mohawk Mountains) and the Air Force (the portion east of the Mohawk Mountains). The BMGR's primary function is to provide a training location for aerial gunnery, rocketry, electronic warfare, tactical maneuvering and air support and an armament and high hazard testing area for other defense related purposes. There are two auxiliary airfields located within the Yuma County portion of the BMGR. Auxiliary Field #2, which is regularly used as a forward airfield for AV-8B, C-130 and helicopter training and Stoval Airfield, which is used by both fixed wing aircraft and helicopters on an intermittent basis.

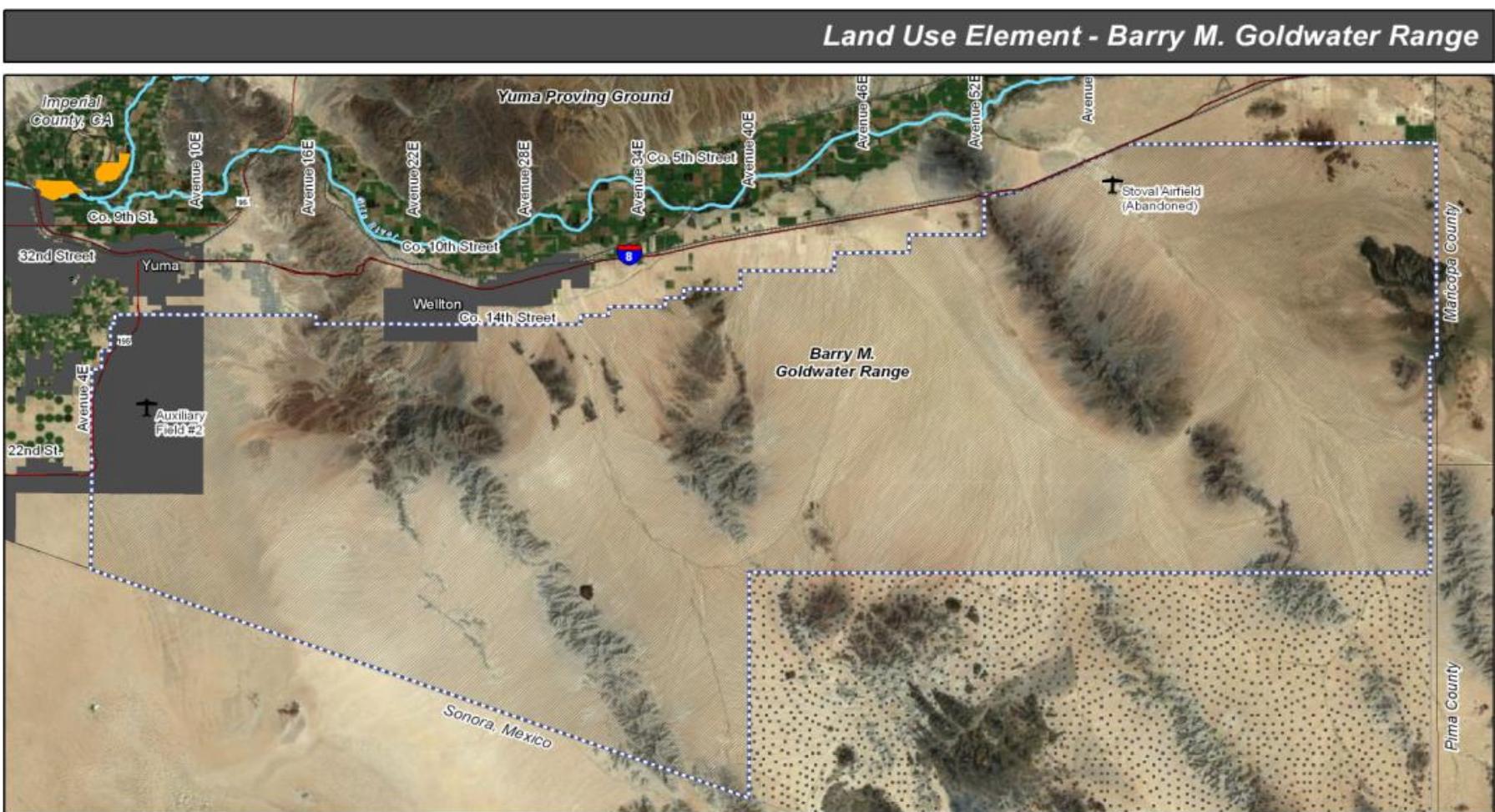
The BMGR is a vital, unique and beneficial asset to Yuma County, the State of Arizona and the U.S. Military. Proximity to supporting military air bases, range land and airspace size, availability of supporting military airspace and varied terrain creates an asset that cannot realistically be reproduced anywhere else in the nation. Without the training opportunities provided by the nearby BMGR , the need for MCAS Yuma would be minimized. The BMGR has a statewide impact as all military installations with a flying mission are dependent on it. In the Legislative Environmental Impact Statement that accompanied the Congressional Bill that extended the timeframe for withdrawal of the public lands that comprise the BMGR for another 25 years, the Department of Defense stated the following about the importance of the BMGR: "*The BMGR has been one of the nation's most productive military reservations for training tactical aircrews since World War II.*"

⁴ Marine Corps Air Station Yuma 2010 Statistical Summary

Yuma County 2020 Comprehensive Plan

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Map 4: Barry M. Goldwater Range

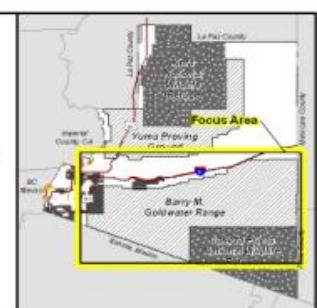
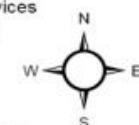


- Barry M.
Goldwater Range
- Incorporated Areas
- Indian Reservations
- National
Wildlife Refuge

For Information Only No Liability Assumed
Yuma County Dept. of Development Services
Source: Yuma County GIS Division

Date: June, 2011

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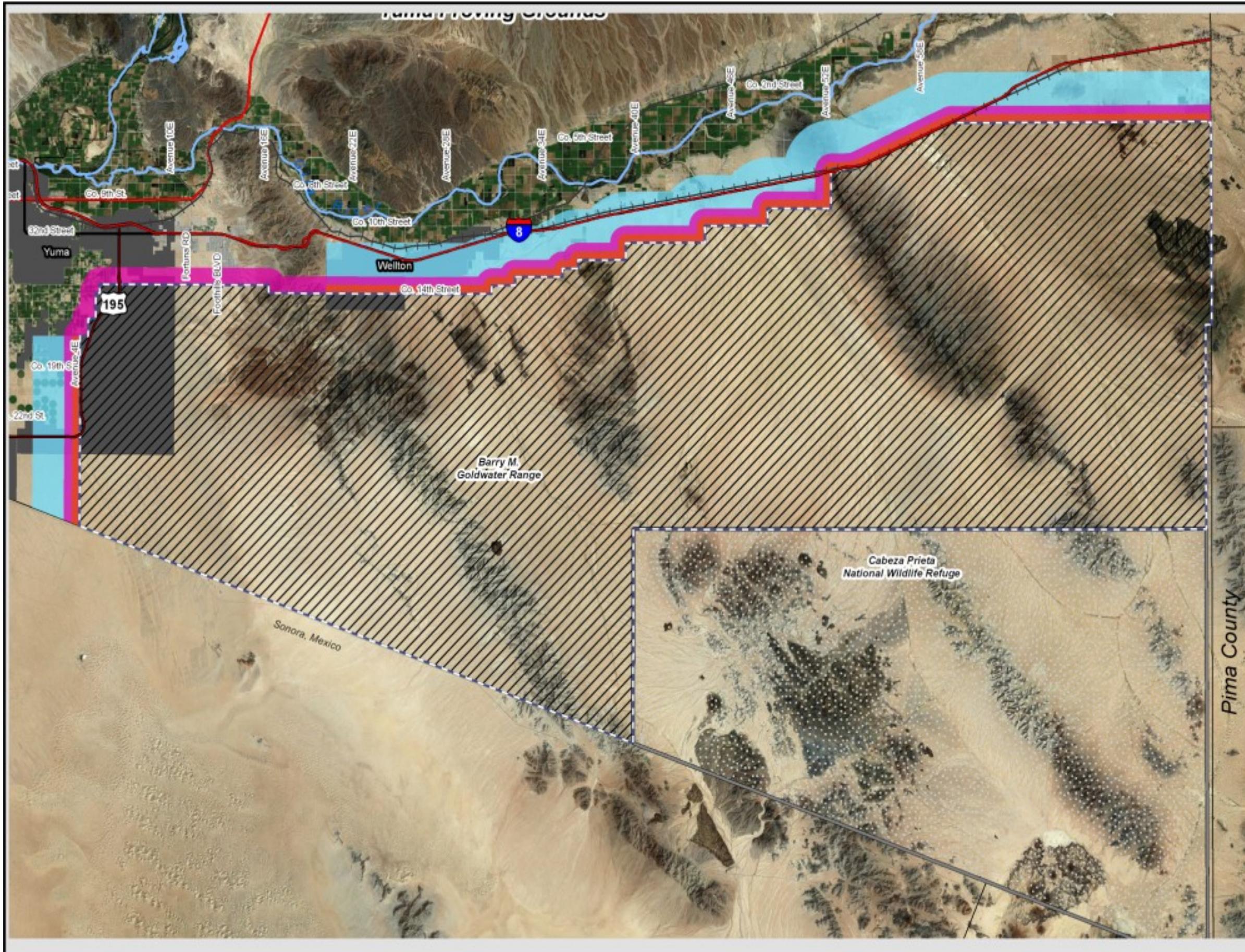
Land Use Element

Barry M. Goldwater Range Buffer Area Land Use Limitation

The Gila Bend Air Force Auxiliary Field/Barry M. Goldwater Range Joint Land Use Study was completed in February 2005 as part of a statewide compatibility project. The study was prepared to provide tools to address land use conflicts that might affect the ability of the base to conduct its mission and to ensure land use compatibility around active military reservations, as required under Title 28, Chapter 25, Article 7, of the Arizona Revised Statutes (ARS). In order to implement the findings of this study the following density and intensity guidelines are established:

- The applied use of land within $\frac{1}{2}$ mile of the boundary of the BMGR that is east of the Gila Mountains will have residential density no greater than 5 acres per lot/parcel.
- The applied use of land within $\frac{1}{2}$ mile of the boundary of the BMGR that is south of County 17th Street on the western boundary of the range will have residential density no greater than 5 acres per lot/parcel.
- The applied use of land from within $\frac{1}{2}$ mile to 1 mile from the BMGR boundary that is east of the Gila Mountains will have residential density no greater than 2 acres per lot/parcel.
- The applied use of land from within $\frac{1}{2}$ mile to 1 mile from the BMGR boundary that is south of County 17th Street on the western boundary of the range will have residential density no greater than 2 acres per lot/parcel.
- Properties being used for residential purposes up to 3 miles from the BMGR boundary that is east of the Gila Mountains will be required to file a Range/Military Ground Support Disclosure Statement.
- Properties being used for residential purposes up to 3 miles from the BMGR boundary that is south of County 17th Street on the western boundary of the range will be required to file a Range/Military Ground Support Disclosure Statement.
- The applied use of land within 1 mile of the BMGR along its western boundary beginning at County 14th running south to County 17th Street will have a residential density no greater than 2 acres per lot/parcel.
- The applied use of land within 1 mile of the BMGR along its northern boundary from Avenue 5 $\frac{1}{4}$ E to the Gila Mountains will have a residential density no greater than 2 acres per lot/parcel.
- Amendments to land use classifications up to 3 miles from the BMGR boundary will take into consideration the impacts of increasing density in regard to potential conflicts with the BMGR.
- Property access to roadways bordering the BMGR boundary (particularly County 14th Street in Yuma County) will be limited to reduce the opportunities for unauthorized access to the Range.
- Use of access roads to the BMGR will be restricted in order to discourage access to the BMGR by unauthorized personnel.

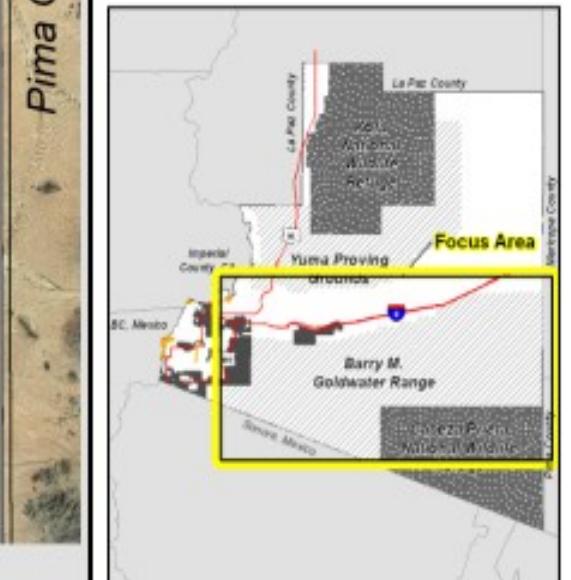
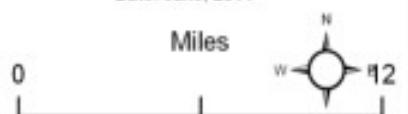
Land Use Element - Barry M. Goldwater Range Buffer Area Land Use Limitation



- Maximum Density of One Dwelling Unit per Five Acres
- Maximum Density of One Dwelling Unit per Two Acres
- Range/Military Ground Support Disclosure Statement Required
- Barry M. Goldwater Range
- National Wildlife Refuge
- Incorporated Areas

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Yuma County Dept. of Development Services
Source: Yuma County GIS Division

Date: June, 2011



Map 5: BMGR Buffer Area Limitation

Agricultural Land Use

Agriculture and related activities in terms of both employment and overall impact to the local economy are the largest sector of Yuma County's economy. From the third quarter of 2009 to the second quarter of 2010, the agricultural sector of the economy was estimated to have employed 8,200 on a permanent basis and 20,200 at the seasonal peak in January of 2010 and has generated approximately \$3 billion dollars of economic activity. Agriculture in Yuma County also plays a unique and significant role nationally. Between October and April of every year over 90% of lettuce and other green vegetables consumed in the United States are grown in Yuma County.

Agriculture in Yuma County is made possible by water from the Colorado River with 154,870 acres being irrigated with water from the river. This water is delivered through a series of canals, siphons and pumping stations maintained and operated by six irrigation districts. All irrigation water is initially diverted from the Colorado River at Imperial Dam.

<i>Crop</i>	<i>Acres Harvested</i>
Fresh Market Vegetables	89,856
Lettuce	66,194
Hay	39,143
Spring Durum Wheat	34,852
Alfalfa	25,789
Cotton	18,197
Lemon	11,770
Broccoli	8,691
Sudan Grass	7,189
Cauliflower	3,887
Cantaloupe	2,913
Bermuda Grass Seed	2,555
Spinach	2,313
Watermelon	2,005
Alfalfa Seed	1,723
Tangelos	1,443
Winter Wheat	1,365
Sorghum	743
Oranges	492
Pima Cotton	351
Honeydew	298

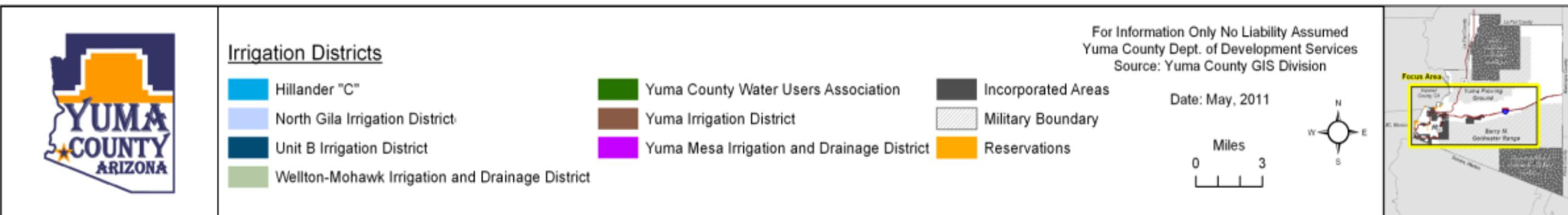
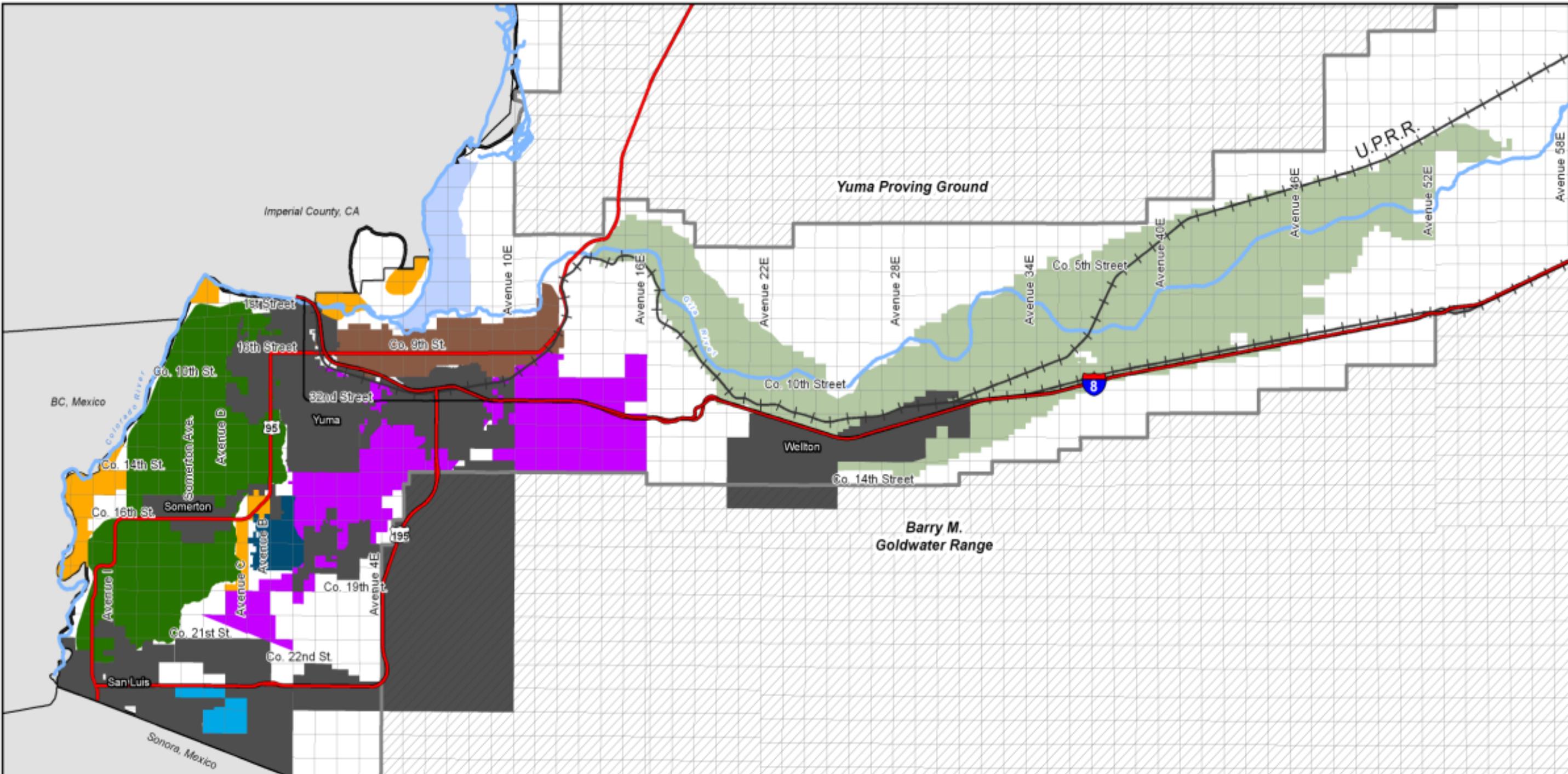
Table 5: Acres Harvested in Yuma County⁶

Domestic water for the City of Yuma and farmland in Yuma County can be divided into general categories based on location, types of crops that can be grown on it, soil types, United States Department of Agriculture (USDA) farmland classification and overall importance to the agricultural industry in the County. The most important of these is commonly known as "valley" farmland. Valley farmland is located in the historical flood plains of the Colorado and Gila Rivers, and as result, is some of the richest, most productive soil found in Arizona. Nearly all valley farmland has been rated by the USDA as prime farmland. Many of the most economically important crops such as lettuce, other vegetables, cotton and wheat are almost exclusively grown on valley farmland. Valley farmland is irreplaceable as very nearly all land with these characteristics is either being irrigated and farmed or has been developed for urban uses. It is because of this irreplaceable nature and the fact it supports a huge portion of the Yuma County economy that maintaining agricultural uses on prime valley farmland is one of the most basic and central goals of the Yuma County 2020 Comprehensive Plan.

The other type of farmland is commonly known as "the mesa". The mesa is located on areas above the historical floodplains of the Colorado and Gila Rivers. Farmlands in these areas are typified by sandy soils that support a different set of crops than those found in the valley. The USDA classifies this farmland as "farmland of unique importance." Some of the most commonly grown crops on the mesa include citrus, alfalfa and dates. While important, these crops tend to be of less economic value than those grown in the valley.

⁶US Department of Agriculture, 2007 Census of Agriculture

Land Use Element - Irrigation Districts



Map 6: Irrigation Districts

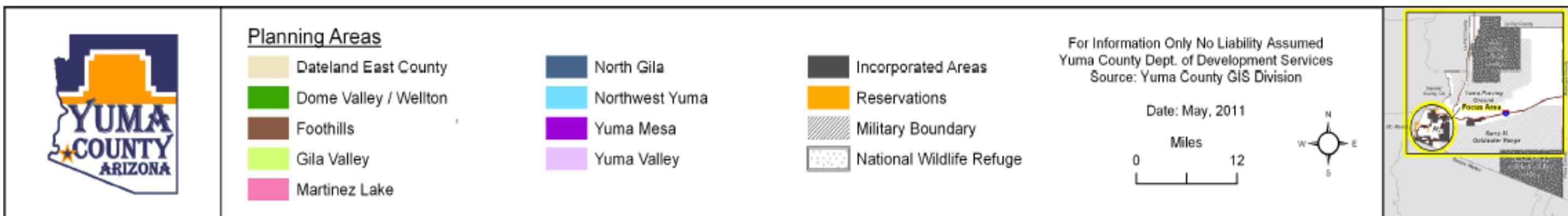
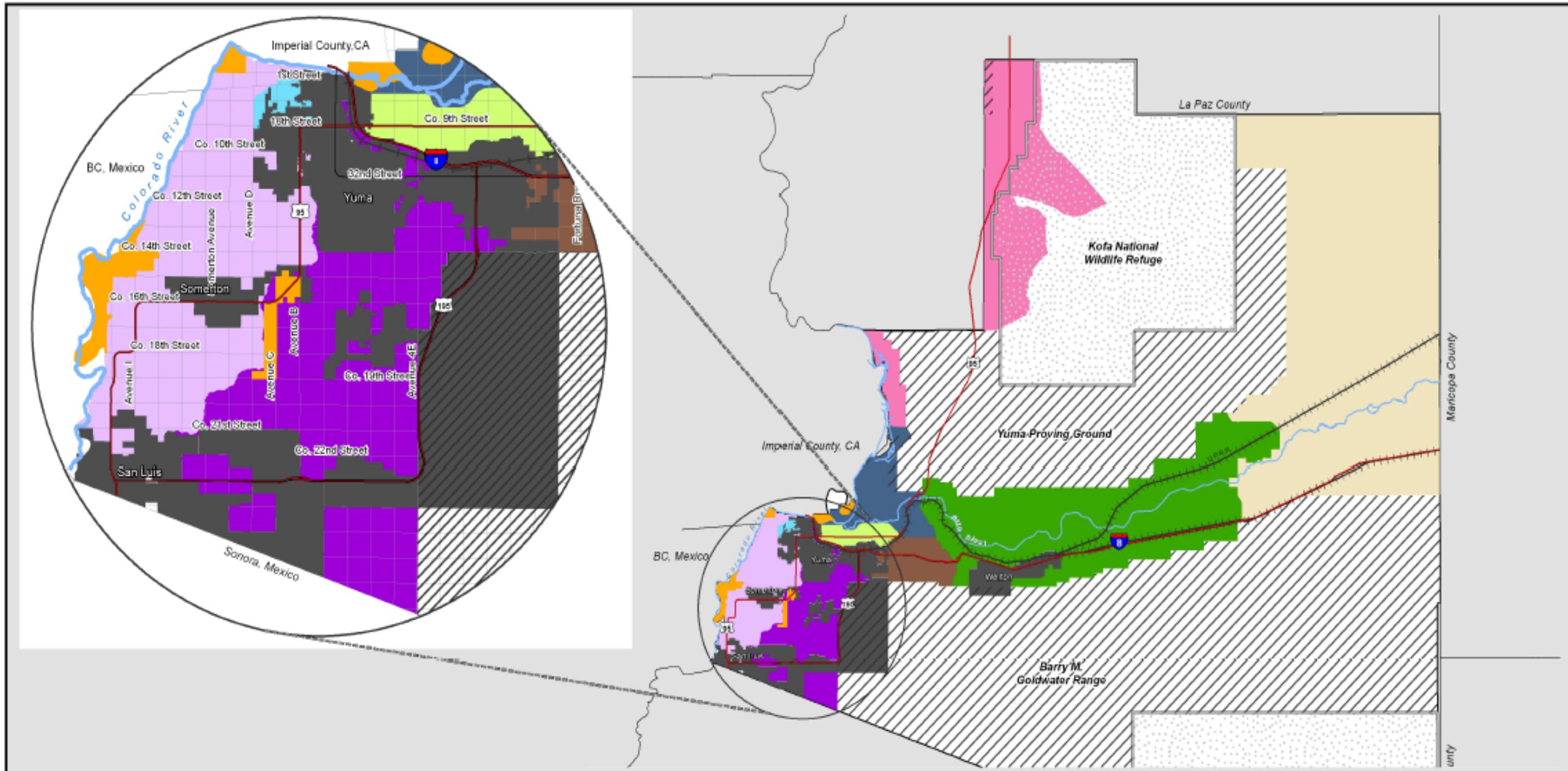
Designated Planning Areas

The county was divided into nine planning areas for analysis of county resources and growth trends. Additionally, as part of the Plan update, seven Citizen Advisory Group Studies were written to provide a base of information and an in-depth understanding of existing conditions and future development and infrastructure needs for each one of the planning areas.

These Planning Areas include the following:

- 1) North Gila
- 2) Yuma Mesa
- 3) Northwest Yuma
- 4) Gila Valley
- 5) Foothills
- 6) Yuma Valley
- 7) Martinez Lake
- 8) Dome Valley/Wellton
- 9) Dateland/East County

Land Use Element - Planning Areas

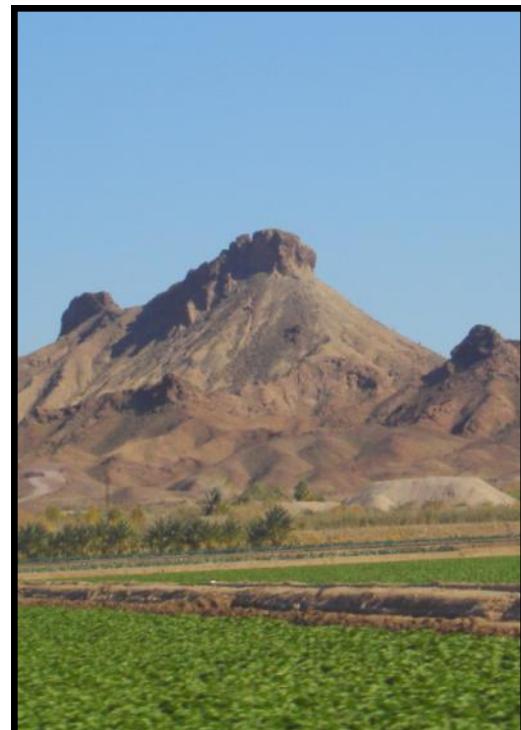


Map 7: Planning Areas in Yuma County

The North Gila Planning Area is comprised of the area roughly bounded by California to the west, Yuma Proving Ground and the Gila Mountains to the east, Levee Road to the south and Imperial Dam to the north. The planning area is almost exclusively located in the Colorado and Gila River valleys. The confluence of the Colorado and Gila Rivers is located along the southern boundary of the planning area. The North Gila Planning Area is a rural area that is predominately used for agricultural purposes with nonagricultural land being mountainous or riparian areas owned by various government entities.

Land designated as Agriculture/Rural Residential makes up 47.8% of the planning area. This represents mostly the portion of the planning area that is irrigated and actively farmed. Land with an Open Space and Recreational Resources designation makes up 40.8% of the planning area. Almost all of this is mountainous land in the Laguna and Gila Mountain ranges owned by the federal government. The North Gila Planning Area contains all of the North Gila Irrigation District and a small portion of the Yuma Irrigation District. Farmland within the North Gila Planning Area tends to be of the highest quality found in Yuma County, all of it located off the mesa in the fertile river bottoms. Some of the more common crops that are grown in the planning area include lettuce, cotton, melons, wheat, safflower and many others.

The total population of the North Gila Planning Area is 1,038. Approximately 75% of the planning area's population lives in a quarter mile area bounded by Canyon Road, Avenue 9E, County 6th Street and Buckshot Road. The planning area has a very low overall population density with 15 persons per square mile over the 60.5 square miles that comprise the planning area. Excluding the area around Buckshot Road, the population density of the planning area is 3.73 people per square mile.



Farmland in the North Gila Planning Area



Housing in the North Gila Planning Area

North Gila Planning Area	
Total Housing Units ⁷	464
Occupied Housing Rate ⁷	83.6%
Manufactured Home Placement Permits Issued ⁸	36
Mobile Home Placement Permits Issued ⁸	3
Single Family Site Built Home Building Permits Issued ⁸	4

Table 6: Housing Units 2000 through 2010

Average Household Size⁷	
North Gila Planning Area	2.24
Yuma County	2.22
Arizona	2.24

Table 7: Average Household Size⁷

Between January 1, 2000 and December 31, 2010, 43 housing units were constructed or placed in the Planning Area. Of these, 84% were manufactured homes, 9% were single family site built homes and 7% were mobile homes. Mobile homes are defined as structures built on or prior to June 15, 1976 on a permanent chassis, but do not include recreational vehicles and factory built buildings.

Nearly all building/placement permits were in two relatively concentrated areas, one bounded by Canyon Road, Avenue 9E, County 6th Street and Buckshot Road and the other in the vicinity of County 3rd Street and the Gila Gravity Main Canal.

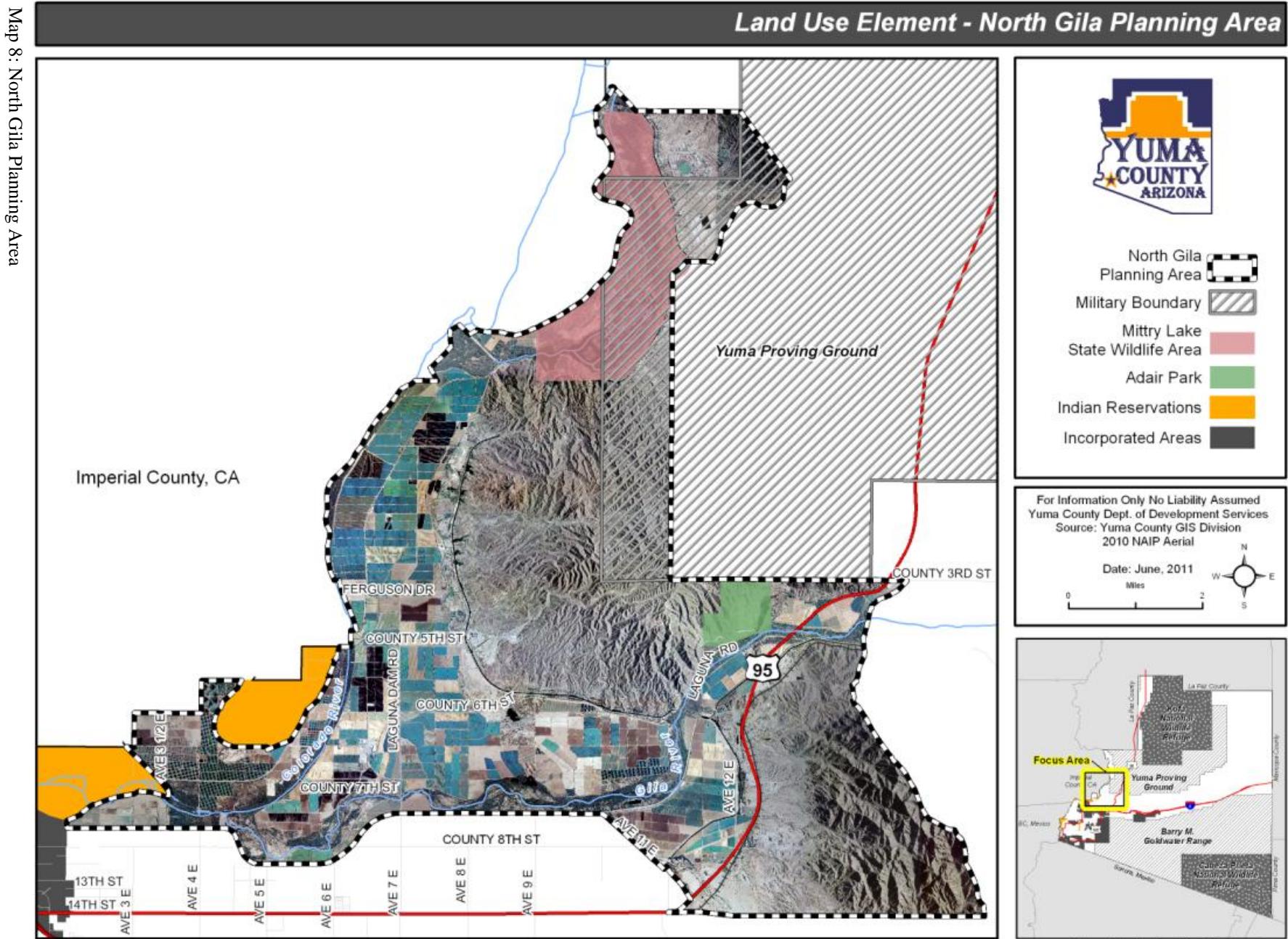
⁷ 2010 U.S. Census

⁸ Yuma County Department of Development Services

Land Use Element

Yuma County 2020 Comprehensive Plan

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The Yuma Mesa Planning Area is comprised of the unincorporated portion of Yuma County that is roughly bounded by the East Main Canal and a small portion of the City of Somerton to the west, the Barry M. Goldwater Range and City of Yuma to the east, the City of San Luis and Mexico to the south and Interstate 8 and MCAS-Yuma to the north. A portion of the Cocopah Reservation is located within the planning area; however, it's part of a sovereign nation and not under the land use planning jurisdiction of Yuma County.

The portion of the planning area located north of County 18th Street is almost entirely privately held land. Land use in this area is a mixture of agricultural uses, primarily citrus and alfalfa fields, rural scale parcels between two and five acres in size and residential development. Land south of County 18th Street to a line running parallel to and five miles north of the Mexican border is largely owned by the State of Arizona and much of it is leased for agricultural purposes or is open desert. There are very few residences in this part of the planning area. Land within five miles of the Mexican border is mostly federally owned, aside from a mix of privately owned land around the State prison and the Hillander "C" Irrigation District. All federal land in this area is open desert.

The total population of the Yuma Mesa Planning Area is 7,411. The planning area has a low population density of approximately 79 persons per square mile. All but 16 of the 7,411 residents of the planning area reside north of County 19th Street. Excluding the nearly uninhabited southern half of the planning area, the population density is 185.5 person per square mile.

MCAS-Yuma is directly adjacent to the planning area. Auxiliary Airfield #2 is located in the Barry M. Goldwater Range three miles east of the planning area. Both these military airfields are covered by the provisions of A.R.S. §28-8481. The types of land uses allowed for land located within the defined noise zones of facilities listed in A.R.S. §28-8481 have significant restrictions. These restriction can be found in Article VII of the Yuma County Zoning Ordinance. Additionally, A.R.S. §28-8481 requires a major amendment for any change to the Comprehensive Plan that would increase residential density or allow for certain non-compatible land uses within any of the defined noise zones.

The Yuma Mesa Planning area covers all or part of three irrigation districts. The Yuma Mesa Irrigation District, Unit B Irrigation District and Hillander "C" Irrigation District. The most common crops in the planning area are citrus and alfalfa. All farmland within the planning area is classified by the United States Department of Agriculture as "farmland of unique importance," which under federal law is defined as: "*land other than prime farmland that is used for production of specific high-value food and fiber crops. It has the special combination of soil quality, location, growing season and moisture supply needed to economically produce sustained high quality or high yields of specific crops when treated and managed according to acceptable farming methods.*"



A Citrus Grove in the Yuma Mesa Planning Area

Yuma Mesa Planning Area	
Total Housing Units ⁹	2,701
Occupied Housing Rate ⁹	82.9%
Manufactured Home Placement Permits Issued ¹⁰	165
Mobile Home Placement Permits Issued ¹⁰	35
Single Family Site Built Home Building Permits Issued ¹⁰	620

Table 8: Housing Units 2000 through 2010

Average Household Size⁹	
Yuma Mesa Planning Area	2.74
Yuma County	2.22
Arizona	2.24

Table 9: Average Household Size⁹

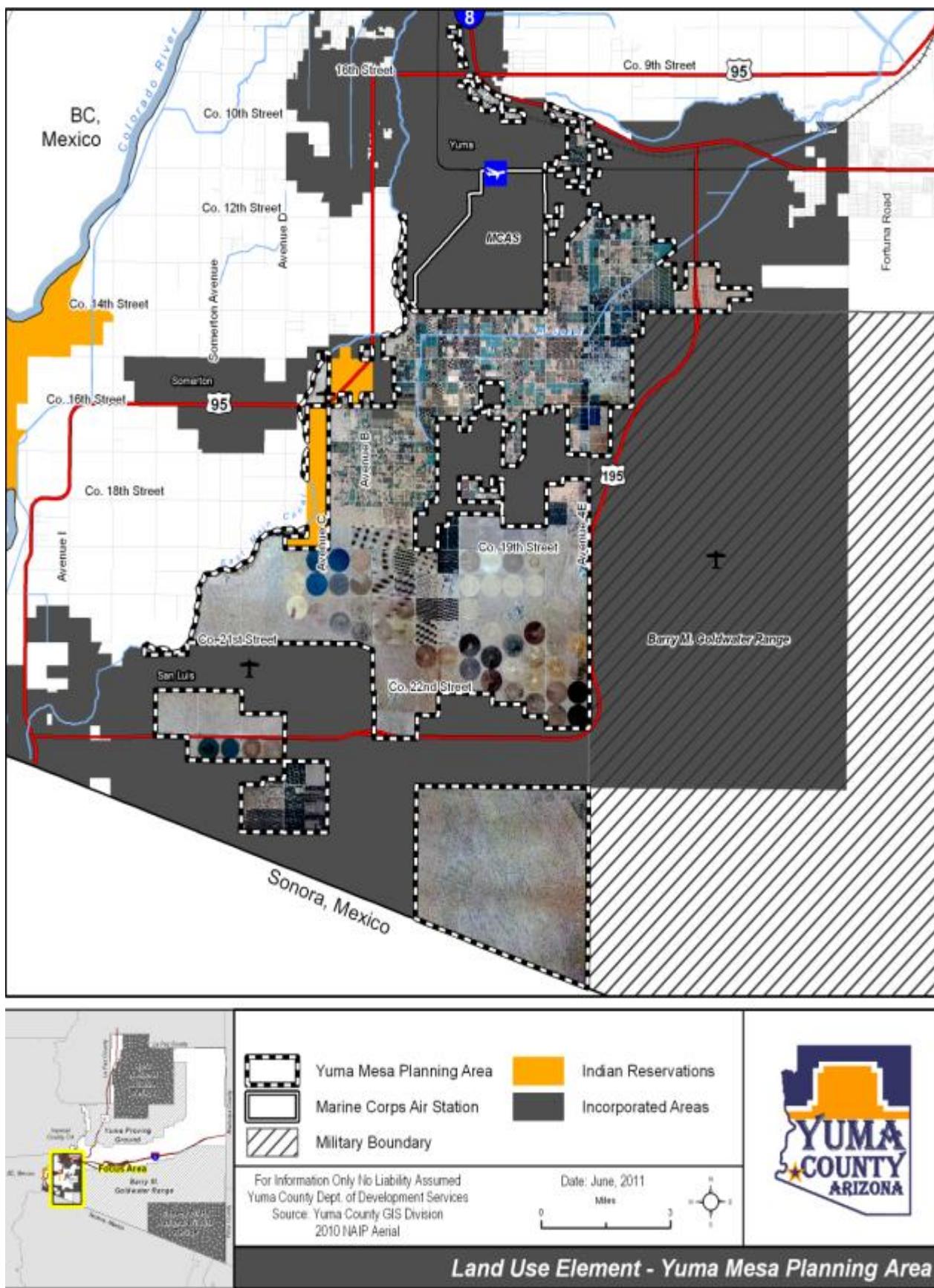
Between January 1, 2000 and December 31, 2010, 819 housing units were constructed or placed in the planning area. Of these, 20% were manufactured homes, 76% were single family site built homes and 4% were mobile homes.

Residential development in the planning area has occurred almost exclusively at rural style densities. The majority of the housing units added to the planning area has been on parcels of at least two acres in size. There is a small number of older more dense subdivisions located in the planning area, but the character and development trend is clearly rural in nature.

⁹ 2010 U.S. Census

¹⁰ Yuma County Department of Development Services

Land Use Element



Map 9: Yuma Mesa Planning Area

The Northwest Yuma Planning Area is comprised of the unincorporated portion of Yuma County that is roughly bounded by Avenue D to the west, the City of Yuma to the south and east, and the West Main Canal and 1st Street to the north. The Northwest Yuma Planning Area is almost entirely composed of older residential neighborhoods. Because the area has been nearly built out for quite some time, development in the planning area tends to occur as redevelopment or infill development. The planning area is located in the Yuma Valley close to the Colorado River. As such, extensive drainage systems and pumping are necessitated due to the high ground water that is found in much of the planning area. In December 2008, the Bureau of Reclamation reported the depth to groundwater at 12 feet or less in the majority of the planning area.

There are two areas within the Northwest Yuma Planning Area federally recognized by the U.S. Department of Housing and Urban Development (HUD) as a colonia. HUD defines colonias as "*rural communities and neighborhoods located within 150 miles of the U.S.-Mexican border that lack adequate infrastructure and frequently lack other basic services.*" The planning area contains two colonias: Avenue B & C Colonia with a population of 2,928 and Donovan Estates with a population of 979.

The total population of the planning area is 9,649. The planning area has a relatively high population density of approximately 5,517.12 persons per square mile. Within the two federally recognized colonias, that population density is higher at 8,537.14 persons per square mile.

Major wastewater treatment issues exist in the Avenue B & C Colonia, an area which makes up a significant portion of the planning area. Individual septic systems function at optimal levels when there is a separation of ten feet from ground to water table. Yuma County's Environmental Programs Section has noted a number of failing septic systems in the area. There are also an unknown number of illegal cesspools in the area. Although the Colonia is within close proximity to the City of Yuma sewer treatment facility, less than five percent of the area is connected to the city's sewer system.

In recognition of the problem, the City of Yuma and Yuma County jointly applied in 1999 to the Border Environmental Cooperation Commission (BECC) for technical assistance funding to perform a study to determine the feasibility of a community wastewater system. The resulting proposed project is to construct a wastewater collection and conveyance system that will connect all existing homes within the Avenue B & C Colonia. In order make this project a reality community leaders in the Colonia have secured the required signatures to form an improvement district. On March 12, 2007 the Avenue B & C Colonia Improvement District No.07-09 was established. Construction on the project began June 2010 and is scheduled to be completed by September 2011.



Homes in the Northwest Yuma Planning Area

Northwest Yuma Planning Area	
Total Housing Units ¹¹	4,044
Occupied Housing Rate ¹²	75.9%
Multi Family Housing Unit Permits Issued ¹²	4
Manufactured Home Placement Permits Issued ¹²	158
Mobile Home Placement Permits Issued ¹²	81
Single Family Site Built Home Building Permits Issued ¹²	98

Table 10: Housing Units 2000 through 2010

Average Household Size¹¹	
Northwest Yuma Planning Area	2.39
Yuma County	2.22
Arizona	2.24

Table 11: Average Household Size¹¹

Between January 1, 2000 and December 31, 2010, 341 housing units were constructed or placed in the planning area. Of these, 46% were manufactured homes, 29% were single family site built homes, 24% were mobile homes and 1% were multi-family site built homes.

In the Northwest Yuma Planning Area 70% of housing units counted in the 2010 Census were non-site built units, meaning that they are manufactured homes and mobile homes. Residential development within the Northwest Yuma Planning Area has followed two distinct patterns between 2000 and 2010: Infill and replacement development on single scattered lots and the replacement of housing units within existing manufactured home parks.

¹¹ 2010 U.S. Census

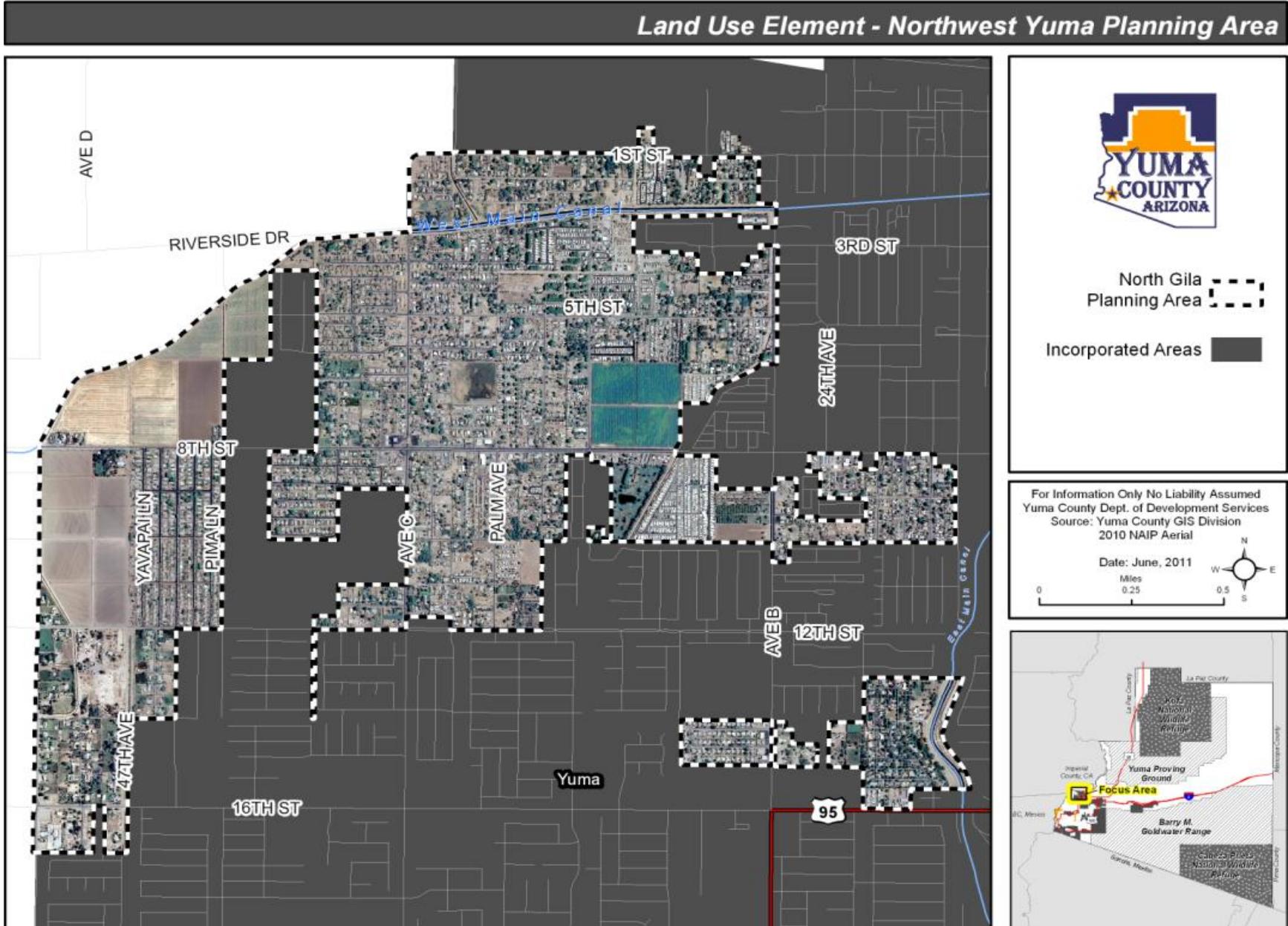
¹² Yuma County Department of Development Services

Land Use Element

Yuma County 2020 Comprehensive Plan

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Map 10: Northwest Yuma Planning Area



The Gila Valley Planning Area is comprised of the area roughly bounded by Pacific Avenue to the west, Fortuna Wash to the east, Levee Road to the north and the City of Yuma to the south. The planning area is almost exclusively located in the Colorado and Gila River valleys. The confluence of the Colorado and Gila Rivers is located along the northern boundary of the planning area. Urbanized areas within the City of Yuma are located directly adjacent to the planning area to the west and south.

The total population of the planning area according to the 2010 U.S. Census was 2,833.

Unlike the urbanized areas to the west and south of the planning area, the overwhelming majority of acreage within the planning area is used for agricultural production. Nearly all the population of the planning area is concentrated into five small distinct and noncontiguous areas. These five areas consist of manufactured home parks, platted subdivisions and wildcat subdivisions that all had their residential usage established decades ago.

Extensive drainage systems and pumping are utilized due to the high groundwater found in much of the planning area. In January 2009, the Bureau of Reclamation reported the depth to groundwater at eight feet or less in 1,509 acres of the planning area. Depth to groundwater fluctuates throughout the year as the amount of the irrigation water being applied changes with the different growing seasons. High ground water can complicate the installation of traditional septic systems and often necessitates the installation of alternative sewage disposal systems.



South Gila Valley Canal



Urbanized Area Next to Farmland

Because MCAS-Yuma is located just south of the planning area it includes areas that are covered by the provisions of A.R.S. §28-8481. The types of land uses allowed for land located within the defined noise zones of facilities listed in A.R.S. §28-8481 have significant restrictions. In these areas, urban style residential development is prohibited and commercial and industrial development must be aviation compatible.

Gila Valley Planning Area	
Total Housing Units ¹³	988
Occupied Housing Rate ¹³	87.3%
Manufactured Home Placement Permits Issued ¹⁴	164
Mobile Home Placement Permits Issued ¹⁴	25
Single Family Site Built Home Building Permits Issued ¹⁴	14

Table 12: Housing Units 2000 through 2010

Average Household Size¹³	
Gila Valley Planning Area	2.87
Yuma County	2.22
Arizona	2.24

Table 13: Average Household Size¹³

Between January 1, 2000 and December 31, 2010 Yuma County issued 203 building permits for residential housing units in the Gila Valley Planning Area. Of these, 189 permits were issued as placement permits for manufactured homes or mobile home (units manufactured prior to 1976) in four existing manufactured home parks.

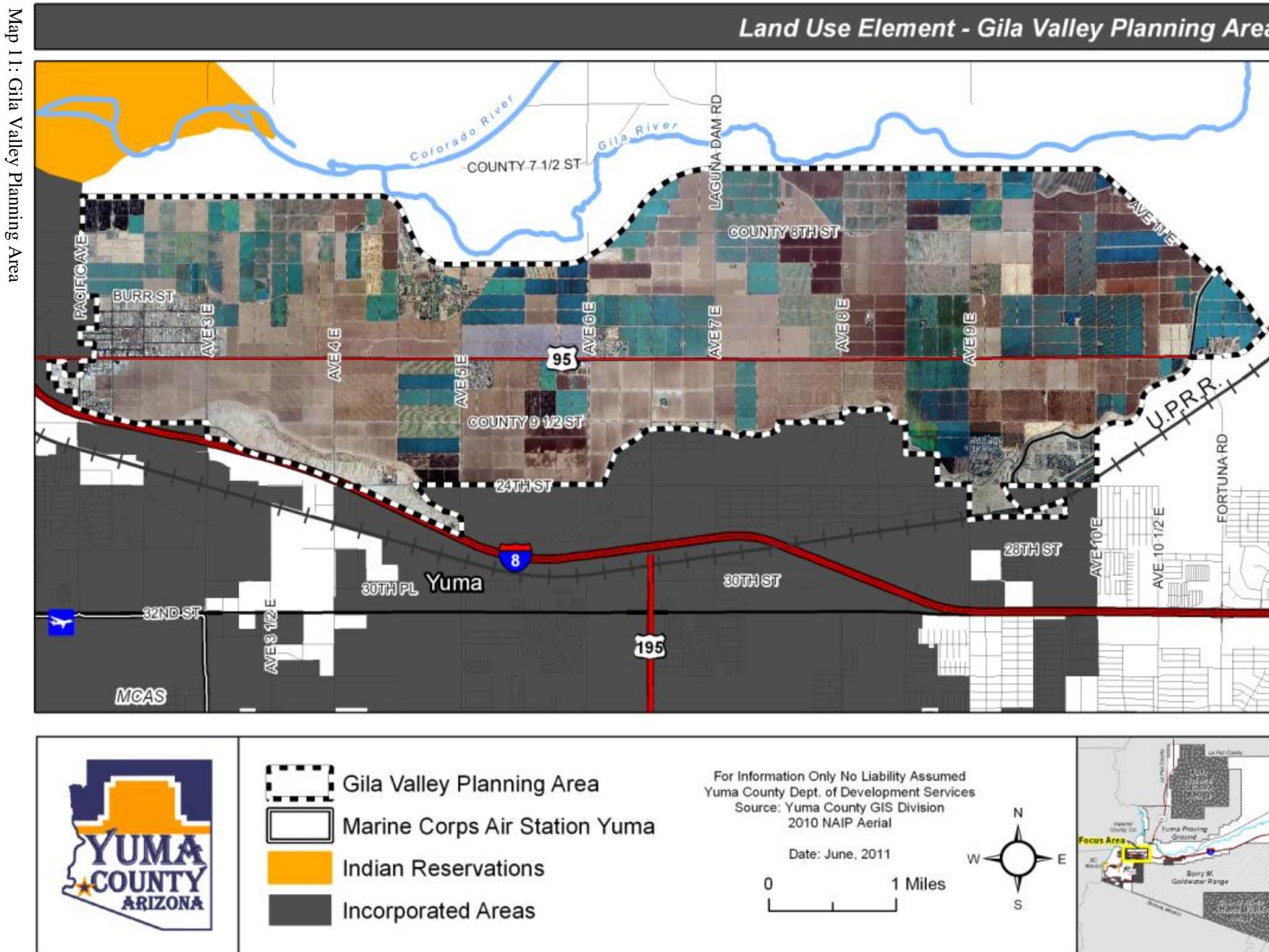
Typically, between ten and fifteen permits for construction or placement of a housing unit are issued in the planning area each year. Nearly all the housing units added in the planning area are located in areas already developed for residential use in manufactured home parks, platted subdivisions or (preexisting wildcat subdivisions). Very few housing units were constructed or placed on land that was previously being farmed.

¹³ 2010 U.S. Census

¹⁴ Yuma County Department of Development Services

Land Use Element

Yuma County 2020 Comprehensive Plan



The Foothills Planning Area is comprised of the unincorporated portion of Yuma County that is roughly bounded by the City of Yuma to the west, the crest of the Gila Mountains to the east, the Barry M. Goldwater Range to the south and the Gila Gravity Main Canal and County 9th Street to the north. Fortuna Wash, which runs in a northeasterly direction, more or less bisects the planning area. Nearly all development within the planning area is west of Fortuna Wash. Land east of Fortuna Wash tends to be more rugged and less developed.

The Foothills Planning Area is an unincorporated community of 28,867 people located directly east of the City of Yuma. The planning area is the most urbanized area in unincorporated Yuma County. The area can be characterized as a bedroom community and by a large number of retirees and seasonal residents. The planning area also serves as a bedroom community for MCAS and YPG, one of the largest employers in Yuma County. Despite the fact that it is over a seventeen mile drive from the Foothills Planning Area to the Yuma Proving Ground, the Foothills is the closest area of residential development to YPG.

The housing stock in the planning area tends to be newer than that found in Yuma County and Arizona as whole. The large majority of housing units in the Foothills Planning Area were constructed after 1990. The home ownership rate in the planning area greatly exceeds that found in Yuma County and Arizona as a whole. However, due to the seasonal residency of a great part of the planning area residents, only 56% of homes are considered occupied, compared with 73.7% and 83.7%, respectively in Yuma County and Arizona as whole.

The State of Arizona owns a significant portion of undeveloped land in the Foothills Planning Area. There are 115 non-federally owned parcels that are larger than ten acres in the planning area. Of these, 18 parcels comprising 6,737 acres (58.7% by acreage) are owned by the State of Arizona. State trust lands are managed by the Arizona State Land Department which is mandated to achieve the highest and best use of the land in order to maximize revenues for the trust's beneficiaries. For state lands to be available an interested party must apply for a parcel to be put up for auction. If the State Land Department feels that an auction at that time is the best way to maximize revenue from that parcel, a public auction is then held. The most recent auction of state trust land in the Foothills Planning Area occurred in the spring of 2006 when 160 acres of state land at the intersection of Scottsdale Drive and 36th Street was auctioned. With ownership of the majority of remaining developable land in the planning area, the Arizona State Land Department will play a major role in the future of the area.



Foothills streetscape

Foothills Planning Area	
Total Housing Units ¹⁵	23,228
Occupied Housing Rate ¹⁵	56%
Manufactured Home Placement Permits Issues ¹⁶	2,056
Mobile Home Placement Permits Issues ¹⁶	66
Single Family Site Built Home Building Permits Issued ¹⁶	3,976

Table 14: Housing Units 2000 through 2010

Average Household Size¹⁵	
Foothills Planning Area	1.24
Yuma County	2.22
Arizona	2.24

Table 15: Average Household Size¹⁵

Between January 1, 2000 and December 31, 2010, 6,098 housing units were constructed or placed in the planning area. Of these, 34% were manufactured homes, 65% were single family site built homes and 1% were mobile homes.

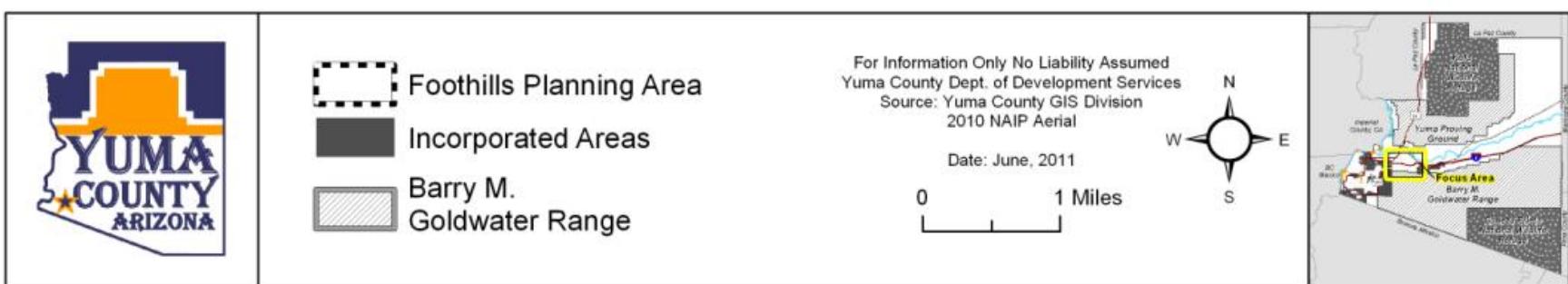
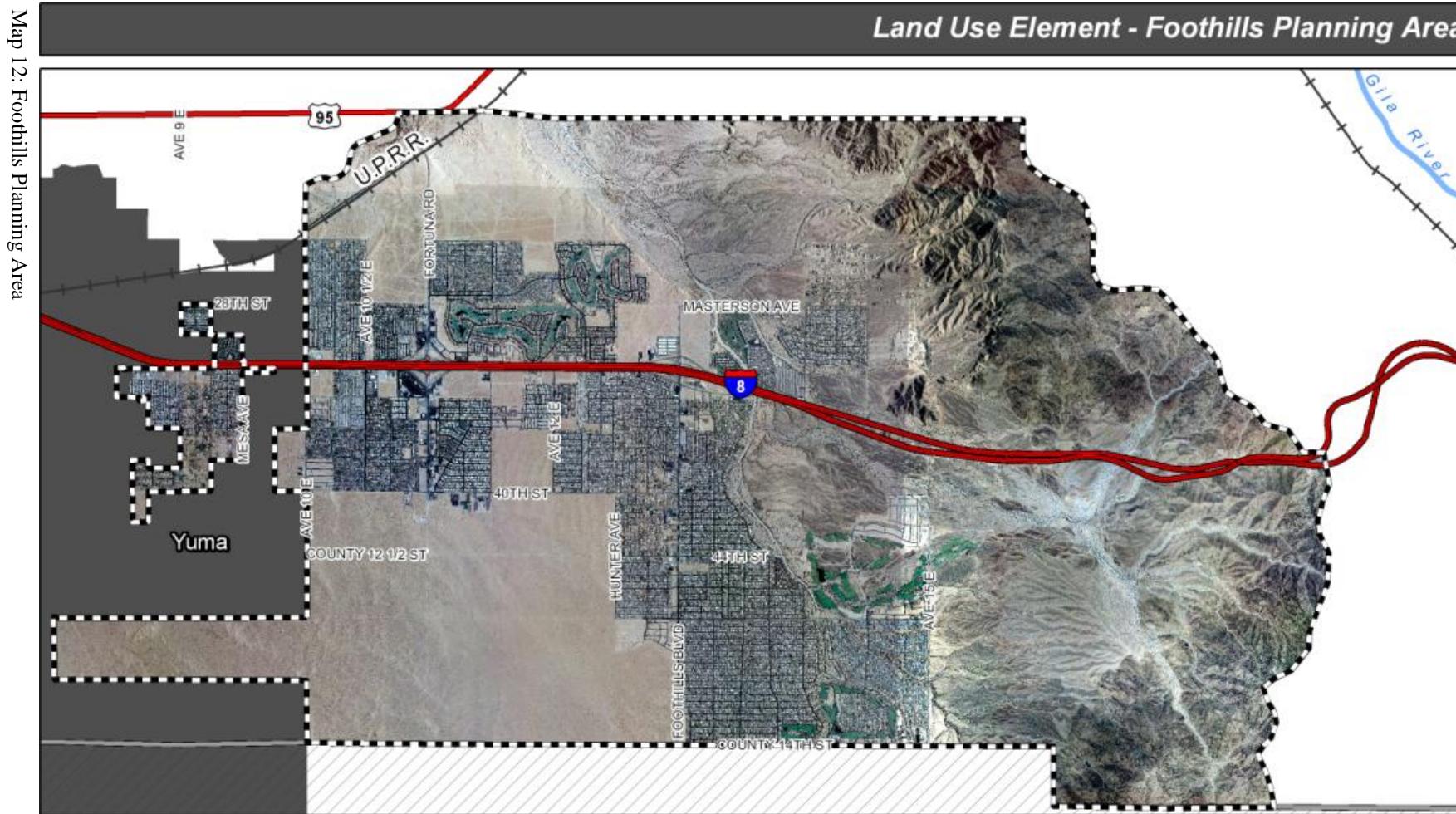
The planning area is primarily a retirement and bedroom community. The planning area represents the center of residential growth in Yuma County. Since 2000, 78.5% of housing units that were constructed/placed in unincorporated Yuma County were done so in the Foothills Planning Area. The vast majority of this new development has occurred as new single family homes on small lots in newly platted subdivisions.

¹⁵ 2010 U.S. Census

¹⁶ Yuma County Department of Development Services

Land Use Element

Yuma County 2020 Comprehensive Plan



The Yuma Valley Planning Area is comprised of the unincorporated portion of Yuma County that is roughly bounded by Mexico to the west, the City of Yuma, Avenue D, the City of Somerton and the East Main Canal to the east, the City of San Luis to the south and California to the north. The planning area is located in the Yuma Valley close to the Colorado River. As such, extensive drainage systems and pumping are required due to the high ground water that is found in much of the planning area. In December 2008 the Bureau of Reclamation reported the depth to groundwater at twelve feet or less in the majority of the planning area. During periods of heavy irrigation groundwater can raise to within two feet of the surface in some areas of the planning area.

There are four areas within the Yuma Valley Planning Area federally recognized by the U.S. Department of Housing and Urban Development (HUD) as a colonia. HUD defines colonias as "*rural communities and neighborhoods located within 150 miles of the U.S.-Mexican border that lack adequate infrastructure and frequently lack other basic services.*" The planning area's four colonias are: Gadsden with a population of 651, Padre Ranchitos with a population of 171, Drysdale Lane with a population of 261 and Wall Lane with a population of 258. Thirty-seven percent of the population of the planning area lives in areas designated by the federal government as a colonia.

The overwhelming majority of the Yuma Valley Planning Area is comprised of large acreage parcels that are actively being used for agricultural purposes. The residential population of the planning area is concentrated in six relatively small areas. About 37% of the population resides in one of the four colonias: In the vicinity of where the West Main Canal crosses County 8th Street, the intersection of County 14th Street and Avenue C or the intersection of County 13th Street and Avenue C. Each of these residential clusters contains about 200 to 1,000 people, the remaining 30% of the population lives in smaller residential clusters or on agricultural home sites. With the exception of parcels in Gadsden, Wall Lane and Padre Ranchitos areas, nearly all residential parcels in the planning area are at least one acre in size.

The Yuma County Water User's Association serves the irrigation needs of the Yuma Valley Planning Area which contains approximately 53,000 acres of irrigated land. This represents 33% of the total irrigated land in Yuma County. Farmland within the planning area tends to be of the highest quality found in Yuma County, all of it located off the mesa in the fertile river bottoms. Some of the more common crops that are grown in the planning area include lettuce, cotton, melons, wheat and safflower. The Yuma Valley is often referred to as the best lettuce growing farmland in the United States.



A residential area adjacent to agricultural production

Yuma Valley Planning Area	
Total Housing Units ¹⁷	1,504
Owner Occupancy Rate ¹⁷	77%
Manufactured Home Placement Permits Issued ¹⁸	45
Mobile Home Placement Permits Issued ¹⁸	18
Single Family Site Built Home Building Permits Issued ¹⁸	56

Table 16: Housing Units 2000 through 2010

Household Size¹⁷	
Yuma Valley Planning Area	2.53
Yuma County	2.22
Arizona	2.24

Table 17: Average Household Size¹⁷

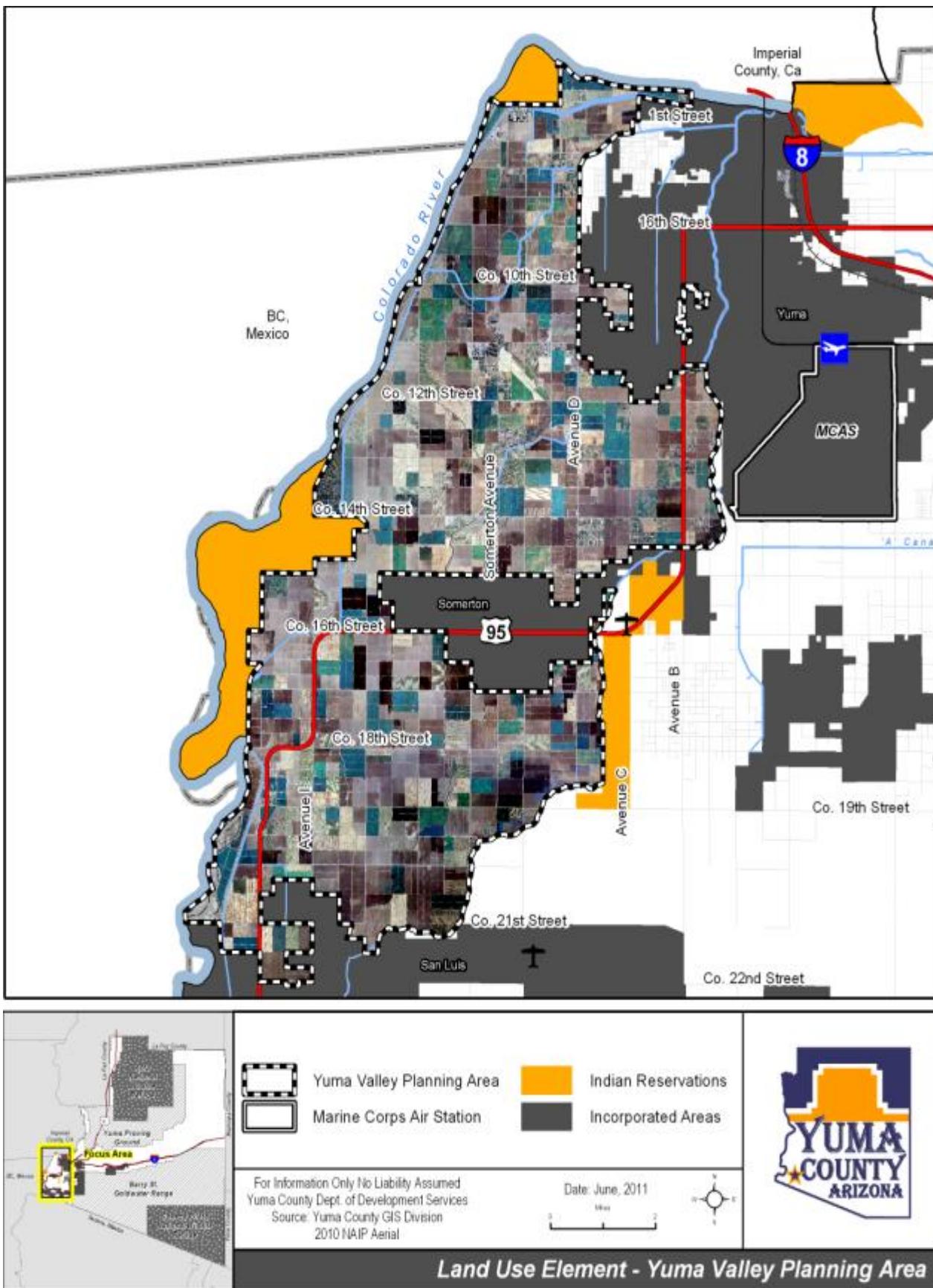
Between January 1, 2000 and December 31, 2010, 119 housing units were constructed or placed in the planning area. Of these, 38% were manufactured homes, 47% were single family site built homes and 15% were mobile homes.

Nearly all building/placement permits were issued in locations spread throughout the planning area, primarily in the Gadsden, Wall Lane, Drysdale, Padre Ranchitos areas and in the vicinity of the intersection of County 14th Street and Avenue C. All these areas had been established as areas of residential development well before 2000. Between 2000 and 2010 no new areas of residential development were added in the Yuma Valley Planning Area.

¹⁷ 2010 U.S. Census

¹⁸ Yuma County Department of Development Services

Land Use Element



Map 13: Yuma Valley Planning Area

Land Use Element

The Martinez Lake Planning Area is composed of two geographically separate areas that can be roughly defined as the portion of Yuma County that is located north of Imperial Dam and west of Yuma Proving Ground and the Kofa National Wildlife Refuge. The topography of the southern portion of the planning area is dominated by the Colorado River and Martinez Lake which forms the western boundary of the planning area and the County. Development in this area centers around the Martinez Lake shoreline. The northern portion of the Martinez Lake Planning Area is a sliver of land located between the La Paz County line and the Kofa Mountains and the Kofa National Wildlife Refuge. There is almost no development within this part of the planning area.

Of the 253 square miles that comprise the Martinez Lake Planning Area only 0.6% of the total area is under private ownership. The 5.5% of the planning area that is owned by the State of Arizona has been very important to the development of the area. 512 housing units were reported in the 2010 Census despite there only being 160 privately owned parcels. The vast majority of housing was constructed on land leased from the State.

The Martinez Lake Planning Area is surrounded on multiple sides by Yuma Proving Ground (YPG). Because of this, activities on YPG have the potential to have a major impact on the planning area. Yuma Proving Ground is the largest employer in Yuma County, employing approximately 3,000 civilian and military employees. In 2009, General Motors relocated its hot weather testing center from Mesa, Arizona to the Yuma Proving Ground. The new test complex which will be shared by the Army and General Motors is in close proximity to the planning area.



Martinez Lake

Martinez Lake Planning Area	
Total Housing Units ¹⁹	512
Occupied Housing Rate ¹⁹	61.5%
Manufactured Home Placement Permits Issued ²⁰	6
Mobile Home Placement Permits Issued ²⁰	0
Single Family Site Built Home Building Permits Issued ²⁰	24

Table 18: Housing Units 2000 through 2010

Household Size¹⁹	
Martinez Lake Planning Area	2.54
Yuma County	2.22
Arizona	2.24

Table 19: Average Household Size¹⁹

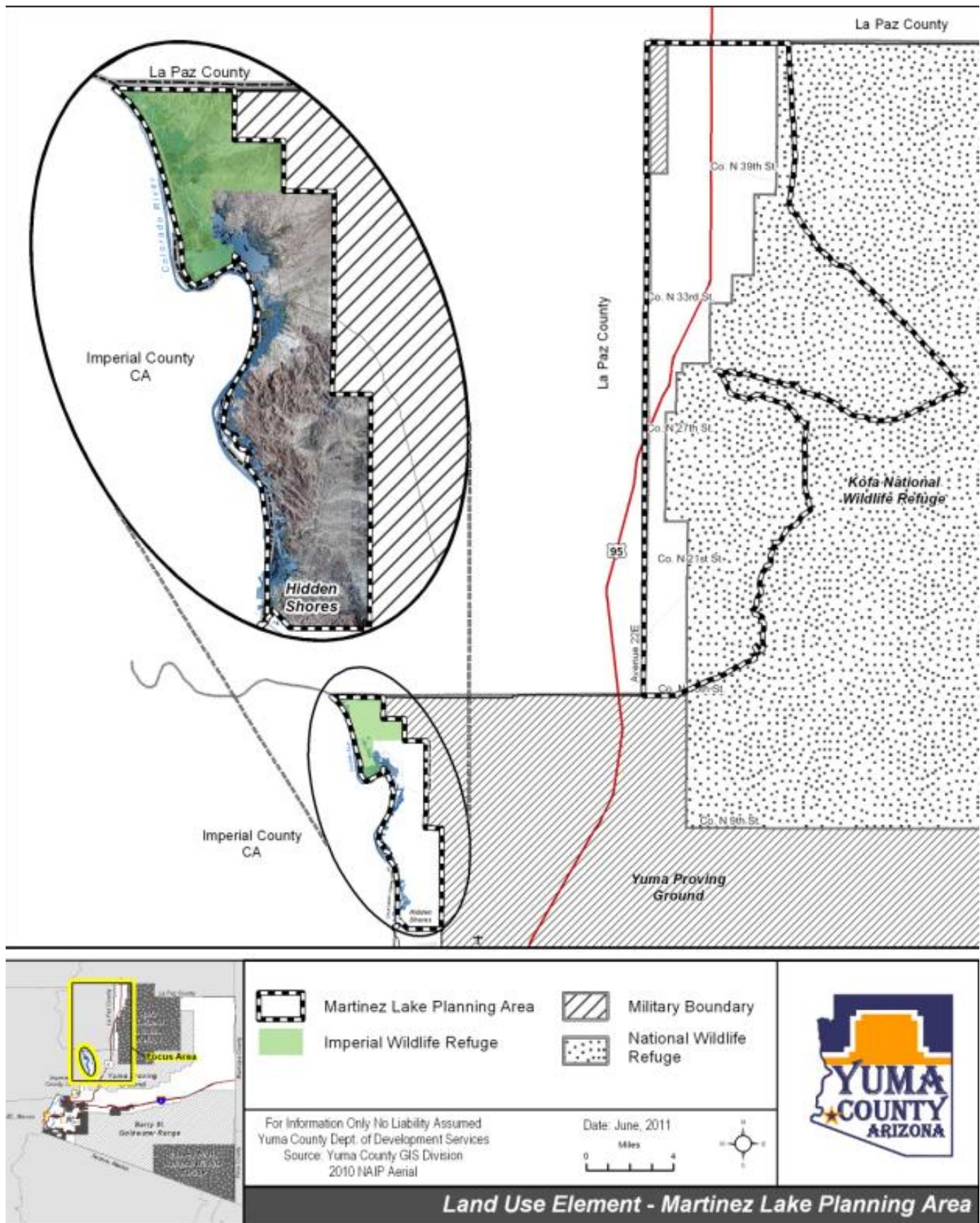
Between January 1, 2000 and December 31, 2010, 30 housing units were constructed or placed in the planning area. Of these, 20% were manufactured homes and 80% were single family site built homes.

The nature of housing in the Martinez Lake Planning Area is clearly of a different nature than found elsewhere in the County. It is an area dominated by vacation homes. In the planning area 51.5% of all housing units are classified as vacation homes. This is a much higher rate than that in the County or State as whole where 15.7% and 6.5% of housing units are classified as vacation homes. Of the 161 privately owned parcels 61%, of them are owned by individuals reporting a California address to the Yuma County Assessor's office.

¹⁹ 2010 U.S. Census

²⁰ Yuma County Department of Development Services

Land Use Element



The Dome Valley/Wellton Area is comprised of the unincorporated portion of Yuma County that is roughly bounded by the crest of the Gila Mountains to the west, the Barry M. Goldwater Range to the south, the crest of the Mohawk Mountains to the east and Yuma Proving Ground to the north. The Gila River runs from east to west bisecting the planning area. The valley through which the Gila River flows contains irrigated, prime farmland and is extensively used for agriculture. The mesa rises abruptly above the Gila River Valley and is a flat area drained by washes. The majority of residential development has occurred on the “mesa.” The Town of Wellton is located in the southwest corner of the planning area. Located in the northwest corner of the planning area, the Muggins Mountains Wilderness Area covers 12 square miles. This area is managed by the Bureau of Land Management in a manner that minimizes as much as possible human impact on the land.

Water supplied by Wellton-Mohawk Irrigation and Drainage District irrigates over 62,000 acres in the Dome Valley/Wellton Planning Area. The resulting agricultural activity is the dominant land use and economic activity of the area. In terms of acreage and value of the harvest, lettuce is the most significant crop in the Dome Valley/Wellton Planning Area. The production of lettuce, occurring between November and March, has become the dominant economic activity of the Dome Valley/Wellton Planning Area. Between November and March, 30% of the lettuce consumed in the United States is grown in the Dome Valley/Wellton Planning Area. Additionally, most of the nation's supply of registered Bermuda grass seed is grown in the Dome Valley/Wellton Planning Area.



Farmland in Dome Valley with the Muggins Mountains in the background

Land Use Element

Approximately 62,000 acres of the Dome Valley/Wellton Planning Area is contained within the Wellton-Mohawk Irrigation and Drainage District (WMIDD), a state chartered municipal corporation that is charged with operating irrigation and power infrastructure within its boundaries. In August 2002, the WMIDD was designated as a Rural Planning Area (RPA) by the Yuma County Board of Supervisors. The RPA is notified by the county of development project applications in the RPA boundaries or within one mile of the RPA boundary. Any recommendation then made by the RPA is forwarded to the Board of Supervisors. In 2008, the WMIDD completed acquiring 86 square miles of land (21.4% of the planning area) from the Bureau of Reclamation as authorized by the Wellton-Mohawk Title Transfer Act. Approximately 18,000 acres contain irrigation and drainage systems and rights-of-way. Approximately 10,600 acres are within the Gila River Flood Channel. A further 17,764 acres were acquired and comprised of land for rights-of-way, flood control or farm unit development. Much of this land is developable and is being marketed by the WMIDD. This represents a significant pool of developable land.

The Dome Valley/Wellton Planning Area contains 31 platted subdivisions. Combined there are 2,222 lots contained within these subdivisions. The 2010 Census reported a combined population of 2,915. 26.4% of the total population of the planning area lives in platted subdivisions. Further, the Census reported 435 housing units within these subdivisions. Yuma County records show that an additional 388 housing units have been added since 2000, which means that of 2,222 lots contained within platted subdivision, 83% are vacant lots. Nearly all these subdivisions were platted several decades ago when County regulations did not require infrastructure improvements to be made prior to recording a final plat. As a result, many but not all of these subdivisions have little to no physical infrastructure for improved roads, water and sewer systems, etc. or, in a few cases clearly established legal access. These deficiencies cause these subdivisions to either not develop or develop at an extremely slow pace. However, some development in these deficient subdivisions does occur, creating pockets of residential development in areas that lack the necessary infrastructure. Finding a way to deal with these deficient subdivisions is one of the major challenges facing the planning area over the next decade.



Tacna, an unincorporated community within the Dome Valley/Wellton Planning Area

Dome Valley/Wellton Planning Area	
Total Housing Units ²¹	1,498
Occupied Housing Rate ²¹	74.4%
Manufactured Home Placement Permits Issued ²²	124
Mobile Home Placement Permits Issued ²²	25
Single Family Site Built Home Building Permits Issued ²²	63

Table 20: Housing Units 2000 through 2010

Household Size²¹	
Dome Valley/Wellton Planning Area	1.95
Yuma County	2.22
Arizona	2.24

Table 21: Average Household Size²¹

Between January 1, 2000 and December 31, 2010, 212 housing units were constructed or placed in the planning area. Of these, 58% were manufactured homes, 30% were single family site built homes and 12% were mobile homes.

The population of the planning area is largely concentrated in the western two-thirds of the planning area. Only about 9% of the population lives east of Tacna. The Gila River Valley, in which nearly all agricultural activity is located, is home to 42% of the planning area's population. However, new residential growth has been occurring almost exclusively in areas located outside the Gila River Valley. Of the 388 new housing units added to the planning area since 2000, only five have been located in the Gila River Valley.

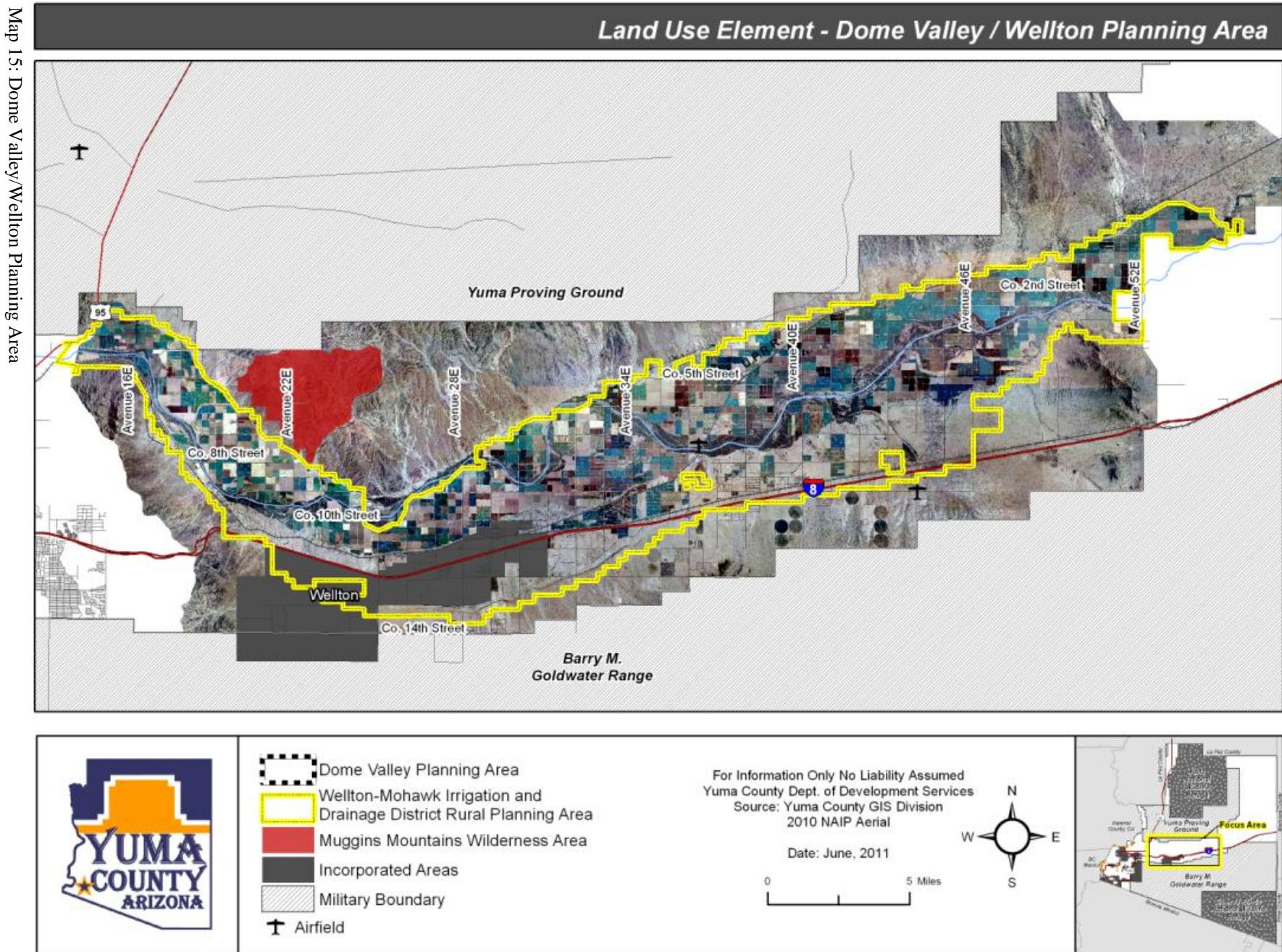
²¹ 2010 U.S. Census

²² Yuma County Department of Development Services

Land Use Element

Yuma County 2020 Comprehensive Plan

Section Three - 46



The Dateland/East County Planning Area is comprised of the unincorporated portion of Yuma County that is roughly bounded by the crest of the Mohawk Mountains and Yuma Proving Ground to the west, the Barry M. Goldwater Range to the south, Maricopa County to the east and La Paz County to the north. The Gila River runs from east to west bisecting the planning area. The Eagle Tail Mountains Wilderness Area covers 12 square miles. This area is managed by the Bureau of Land Management in a manner that minimizes as much as possible human impact on the land.

The planning area contains the unincorporated communities of Dateland and Hyder. These communities are characterized as being rural. Dateland is the largest community in the planning area and is located at the intersection of Avenue 64E and Interstate 8 (I-8) on the south side of the planning area. Dateland was established as a result of the farming and railroad transportation activities in the area. Existing development includes services and commercial activities, school district facilities, a community center and a residential district located northeast of the intersection of I-8 and Avenue 64E. On the south side of this interchange is an active gas station, restaurant and gift shop at which Greyhound and tour buses stop. Directly north of this area are several unimproved subdivisions that are mostly vacant with only a scattering of lots being actually developed. Further north in the Gila River Valley are many acres of fallow farmland.

Hyder is located south of Palomas Road along the Maricopa County line. Hyder was a railroad stop for the Southern Pacific Railroad near the Agua Caliente Mountains. Hyder was established by the U.S. Army Training Center in World War II. North of the railroad tracks are several labor camps consisting of mobile homes.

The Dateland/East County Planning Area contains 26 platted subdivisions. Combined there are 5,157 lots contained within these subdivisions. The 2010 Census reported a combined population of 815, of which 35.7% of the total population of the planning area live in a platted subdivision. Further, the Census reported 118 housing units within in these subdivisions which means that of 5,157 lots contained within platted subdivision, 96.9% are vacant lots. Nearly all these subdivision were platted several decades ago when County regulations did not require infrastructure improvements to be made prior to the recording of a final plat. As a result , many but not all of these subdivisions have little to no physical infrastructure, improved roads, water, sewer, etc. or in a few cases clearly established legal access. These deficiencies caused these subdivisions to either not develop or develop at an extremely slow pace. However, some development in these deficient subdivisions does occur creating pockets of residential development in areas that lack the necessary infrastructure. Finding a way to deal with these deficient subdivisions is one of the major challenges facing the planning area over the next decade.



Dateland

Dateland/East County Planning Area	
Total Housing Units ²³	486
Owner Occupancy Rate ²³	56.1.%
Manufactured Home Placement Permits Issued ²⁴	70
Mobile Home Placement Permits Issued ²⁴	26
Single Family Site Built Home Building Permits Issued ²⁴	6

Table 22: Housing Units 2000 through 2010

Household Size²³	
Dateland/East County Planning Area	1.68
Yuma County	2.22
Arizona	2.24

Table 23: Average Household Size¹

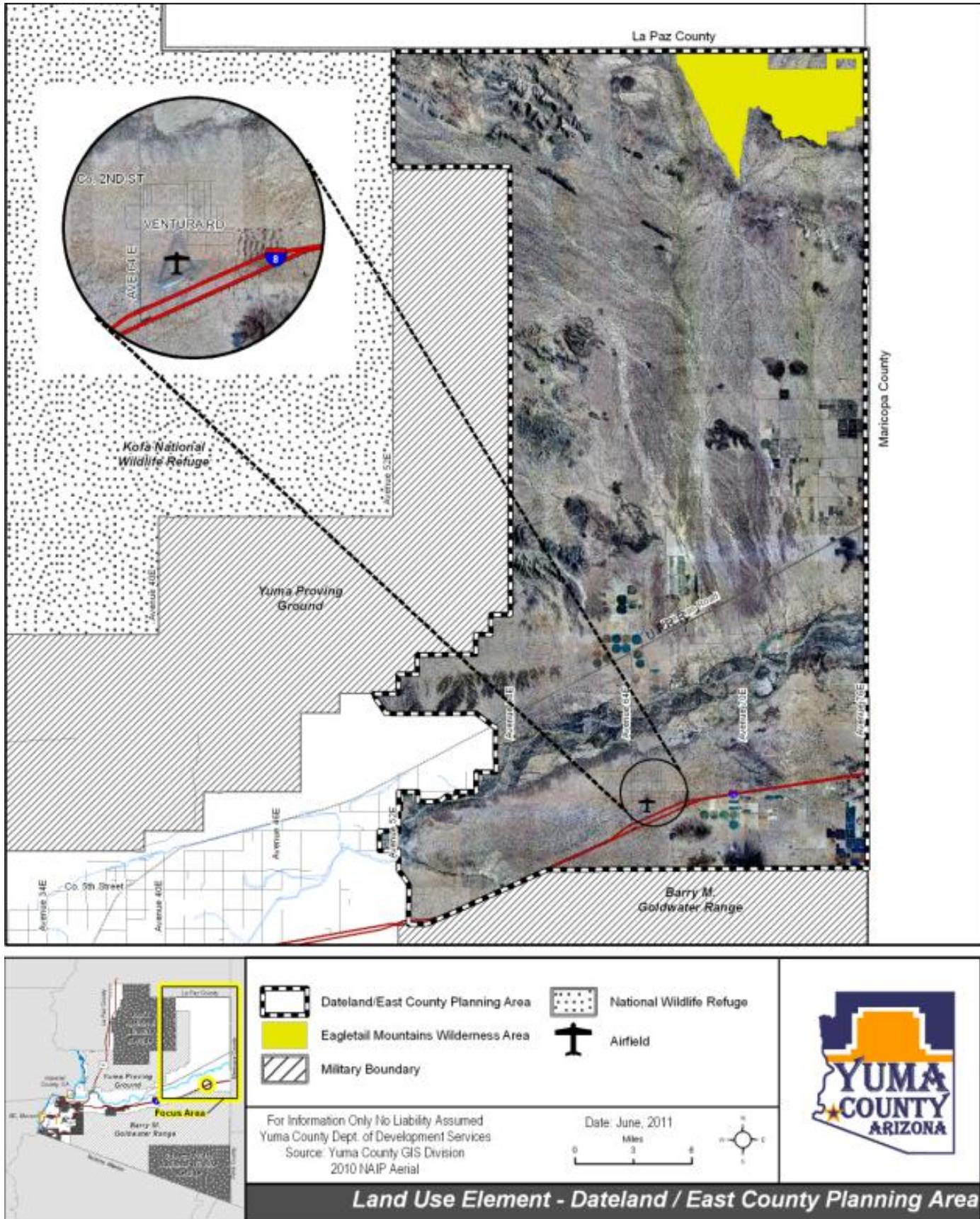
Between January 1, 2000 and December 31, 2010, 102 housing units were constructed or placed in the planning area. Of these, 69% were manufactured homes, 6% were single family site built homes and 25% were mobile homes.

The unincorporated community, which is roughly located at the intersection of Avenue 64E and Interstate 8, contains 41% of the planning area population and is the location of the area's school and businesses. The balance of the planning area's population is scattered through the southern two-thirds of the planning area. However, new residential growth has been mostly occurring in the immediate vicinity of Dateland. Of the 162 new housing units added to the planning area since 2000, the majority have been located in the immediate vicinity of Dateland.

²³ 2010 U.S. Census

²⁴ Yuma County Department of Development Services

Land Use Element



Map 16: Dateland/East County Planning Area

3.2 Land Use Designations

In order to implement the goals, objectives and policies of the *Yuma County 2020 Comprehensive Plan*, 21 land use designations have been established. Each land use designation contains the allowed uses and densities that are desired on land with that designation. All lands under the planning jurisdiction of Yuma County have been assigned a land use designation. Any land coming under the land use planning jurisdiction subsequent to the adoption of the Yuma County 2020 Comprehensive Plan will be assigned a land use designation of Agriculture/Rural Preservation.

A.R.S. § 11-829(A) requires that: “*All zoning and rezoning ordinances, regulations or specific plans adopted under this article shall be consistent with and conform to the adopted county plan.*” In order to comply with this provision of state law and to further implement the goals, objectives and policies of the *Yuma County 2020 Comprehensive Plan*, all proposed rezonings will be checked against the Plan to determine if the proposed zoning district conforms with the land use designation of the parcel in question. A.R.S. § 11-829(A) states that: “*A rezoning ordinance conforms with the county plan if it proposes land uses, densities or intensities within the range of identified uses, densities and intensities of the county plan.*” In order for a rezoning to proceed and be heard by the Planning and Zoning Commission and then Board of Supervisors it must be determined to be in conformance with the Plan. For proposed rezonings that do not conform to the Comprehensive Plan, an amendment to the land use map to change the land use designation must be approved before the rezoning can be heard.

A county island is an area of unincorporated land which is completely surrounded by a city or town. County islands are created when a city or town annexes land into their corporate boundaries but excludes certain areas. Those excluded areas that remain under county jurisdiction are referred to as county islands. In accordance with **A.R.S § 11-831. Additional requirements for certain lands:** A. The rezoning or subdivision plat of any unincorporated area completely surrounded by a city or town shall use as a guideline the adopted general plan and standards as set forth in the subdivision and zoning ordinances of such city or town after the effective date of this section. B. The board or commission, before taking any action on a rezoning or subdivision plat in an area as set forth in subsection A, may require the affected city or town to supply information to allow the county to meet the guideline. If an affected city or town objects to any such proposed action the board or commission shall set forth in the minutes of the meeting specific reasons why in its opinion the guideline is actually being followed or why it is not practicable to follow the guideline of the general plan.

A property’s land use designation does not impact existing uses of a property, the owner’s right to its continued use or repairs or alterations of said uses. These things are governed by *the Yuma County Zoning Ordinance*. A property may be used in any manner allowed by the Zoning Ordinance including approved Special Use Permits and non-conforming uses regardless of the use designation. There are numerous zoning districts that predate the first adopted Comprehensive Plan and as a result, have zoning districts that do not match their land use designation. Mandatory conformity to the Comprehensive Plan is only triggered when a property’s zoning district is changed.

Land Use Element

The following pages describe the different land use designations that have countywide applicability. There are a total of 21 land use designations in Yuma County described by name, color schematic, allowed uses, densities and intensity of use.

<i>Land Use Designation</i> <i>(Abbreviation and Symbol)</i>	<i>Description, Allowed Uses and Densities</i>
Agriculture/Rural Preservation (A-RP) 	<ul style="list-style-type: none"> • A designation that supports resource preservation districts with emphasis on protecting and preserving agricultural related resources and continued agricultural use and limiting development in rural areas that lack the basic infrastructure to support even limited low density residential development. • Land principally devoted to agricultural production. • Areas lacking access to the infrastructure necessary to support development. • Minimum parcel size of 40 acres.
Agriculture/Rural Residential (A-RR) 	<ul style="list-style-type: none"> • A designation that supports resource conservation districts and reserves with emphasis on preserving farm communities and character. • Recognizing land with potential to be divided into rural lots that are compatible with continued agricultural use on surrounding parcels. • Acknowledge residential character and allow for division into rural lots. • Minimum parcel size of 10 acres.
Agriculture/Rural Development (A-RD) 	<ul style="list-style-type: none"> • A designation that supports resource conservation districts and reserves with emphasis on preserving farm communities and character and to allow for residential development in areas that are only compatible with a very low density style of residential development. • Recognizing land with potential to be divided into rural lots that are compatible with continued agricultural use on surrounding parcels. • Acknowledge residential character and encourage division into rural lots. • Minimum parcel size of 5 acres.

<p>Rural Density Residential (R-RD)</p> 	<ul style="list-style-type: none"> • A designation that supports residential uses and densities that are rural in nature. This designation allows for residential development that is compatible with surrounding agricultural uses and other areas and uses that are incompatible with urban style residential development. Allows for residential development in conjunction with continued agricultural uses and the keeping of a limited number of horses and farm animals. Allows for residential development in areas that have insufficient infrastructure to support residential development at a greater density. The large parcel size required under the Rural Density Residential designation allows for a single parcel to contain both a septic tank and a well. Residential development can take the form of site-built homes or manufactured homes. • 1 dwelling unit per 2 acres to 1 dwelling unit per 10 acres (minimum 2 acre parcels).
<p>Ranchette Residential (R-R)</p> 	<ul style="list-style-type: none"> • A designation that supports residential uses and densities that have a mix of both semi-urban and rural characteristics. The intent of this designation is to create a style of development that can serve as a transition between agricultural and rural residential uses and a more urban style of development. Allows for all zoning districts with a minimum size that allows for having both a well and on-site sewage treatment, and allows for the keeping of large farm animals. Residential development can take the form of site-built homes or manufactured homes. • 1 dwelling unit per acre to 1 dwelling unit per 5 acres (minimum 1 acre parcels).
<p>Estate Density Residential (R-ED)</p> 	<ul style="list-style-type: none"> • A designation that supports residential uses and densities that have a mix of both urban and rural characteristics. The intent of this designation is to create a style of development that can serve as a transition between agricultural and rural residential uses and a more urban style of development. Allows for the keeping of a limited number of horses and farm animals on appropriately sized parcels. Residential development can take the form of site-built homes or manufactured homes. • 2 dwelling units per acre to 1 dwelling unit per 5 acres (minimum $\frac{1}{2}$ acre parcels).

<p>Suburban Density Residential (R-SD)</p>	<ul style="list-style-type: none"> • A designation that supports residential uses and densities that have a mix of both urban and rural characteristics. The intent of this designation is to create a style of development that can serve as a transition between agricultural and rural residential uses and a more urban style of development. Allows for the keeping of a limited number of horses and farm animals on appropriately sized parcels. Residential development can take the form of site-built homes or manufactured homes. • 3 dwelling units per acre to 1 dwelling unit per 2 acres (minimum $\frac{1}{3}$ acre parcels).
<p>Low Density Residential (R-LD)</p>	<ul style="list-style-type: none"> • A designation that supports residential uses and densities that are urban in nature. Low Density Residential allows the lowest residential density of urban style residential development. It is primarily characterized by neighborhoods of detached single family homes that can be either site-built or manufactured homes. • 1 to 6 dwelling units per acre.
<p>Medium Density Residential (R-MD)</p>	<ul style="list-style-type: none"> • A designation that supports residential uses and densities that are urban in nature. Medium Density Residential allows a density that falls between that found in neighborhoods with detached single family homes and the most dense forms of residential developments such as apartment complexes. It is primarily characterized by neighborhoods of detached single family homes on small lots, attached single family homes, duplexes, triplexes, condos and/or manufactured home parks. Allows for dwelling units to be manufactured, site-built or recreational vehicles. • 4 to 12 dwelling units per acre.
<p>Urban Density Residential (R-HD)</p>	<ul style="list-style-type: none"> • A designation that supports residential uses and densities that are urban in nature. Urban Density Residential allows the highest possible density of residential development. It is primarily characterized by multi-family dwelling units and recreational vehicle parks. Allows for dwelling units to be manufactured, site-built or recreational vehicles. • 10 to 18 dwelling units per acre.

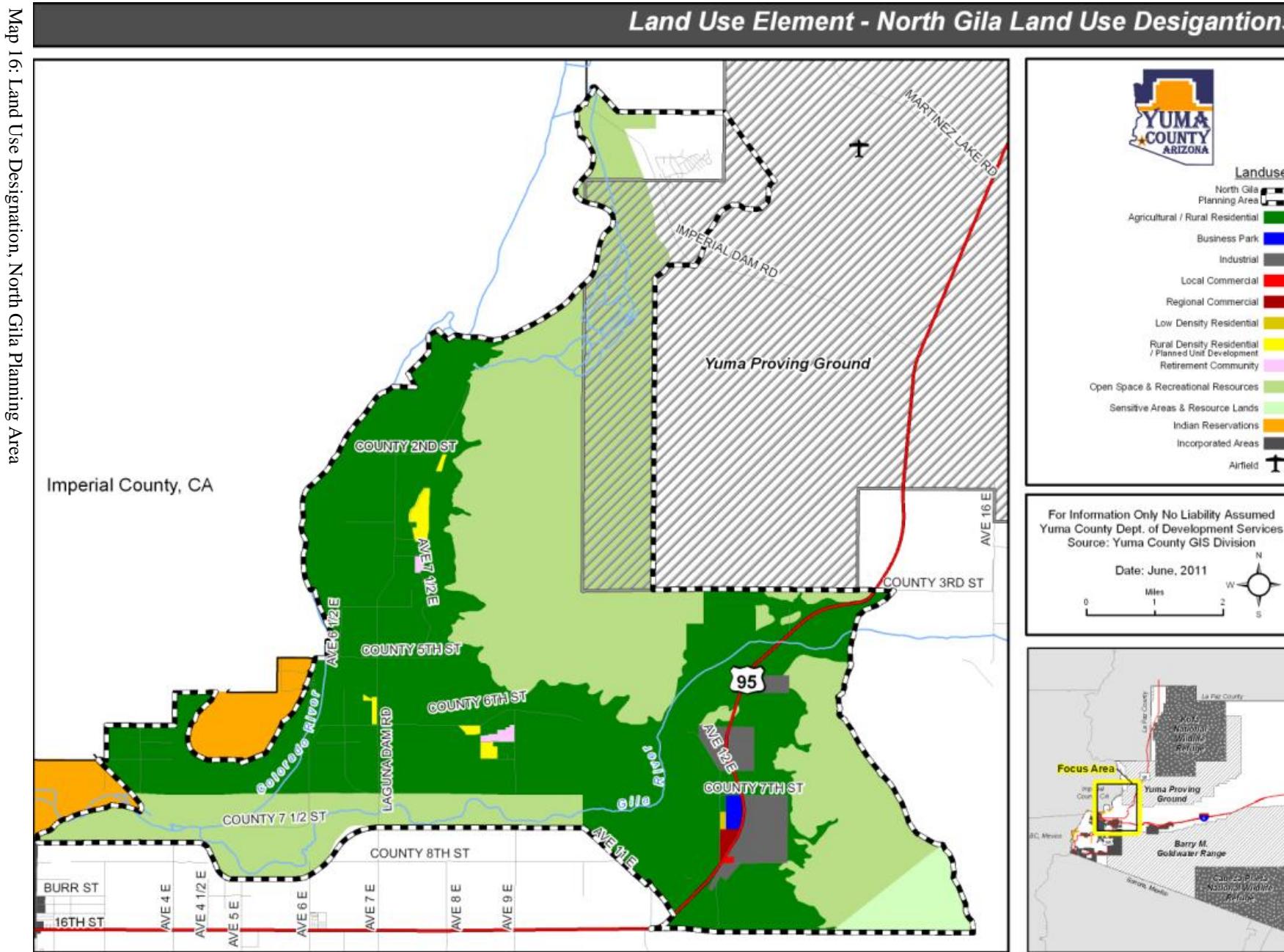
Land Use Element

Mixed Use Residential (R-MU)		<ul style="list-style-type: none"> • A designation that supports mixed use areas: Recreational vehicles, manufactured homes, site built and local commercial; • Areas with more than one primary use category; • Encourages neighborhood oriented commercial; • Recognizes need for caretaker and institutional facilities. • Limited local commercial uses; • Mixed uses are those which rightfully fall into two or more classifications. By using mixed-use classifications, the aggregations of adjacent parcels have more flexibility.
Retirement Community/Planned Unit Development (R-RC)/(PUD)		<ul style="list-style-type: none"> • A designation that supports land, subdivision and facilities exclusively committed to providing the services associated with meeting the increasing demands oriented towards retirees or retirement communities; • Second dwelling units; • Mixed uses and nodes to support needed residential and light commercial services; • Assisted living; • Planned communities.
Agriculture/Industrial (A-I)		<ul style="list-style-type: none"> • A designation that supports continued agricultural uses. • Site-built residences with noise attenuation subject to the zoning densities in effect prior to September 12, 1996. • Aviation-compatible industrial uses subject to the demonstration and completion of the appropriate public infrastructure, public services and long term water allocation needed for development.
Industrial (I)		<ul style="list-style-type: none"> • A designation that supports industrial uses with related offices.
Business Park (BP)		<ul style="list-style-type: none"> • A designation that allows for developments that may mix light industrial, general commercial, retail and/or office uses, preferably in a high visual quality, business park or campus-type setting. Types of development allowed under this designation include: • Light industrial uses and related offices; • Commercial outlets or combination enterprises.
Local Commercial (C-LC)		<ul style="list-style-type: none"> • A designation that promotes and preserves convenient neighborhood commercial areas which contain retail, service and office establishments that meet the daily needs of nearby neighborhoods. Examples of this include the following: <ul style="list-style-type: none"> • Small retail stores; • Office uses; • Shopping and restaurant-type activities.

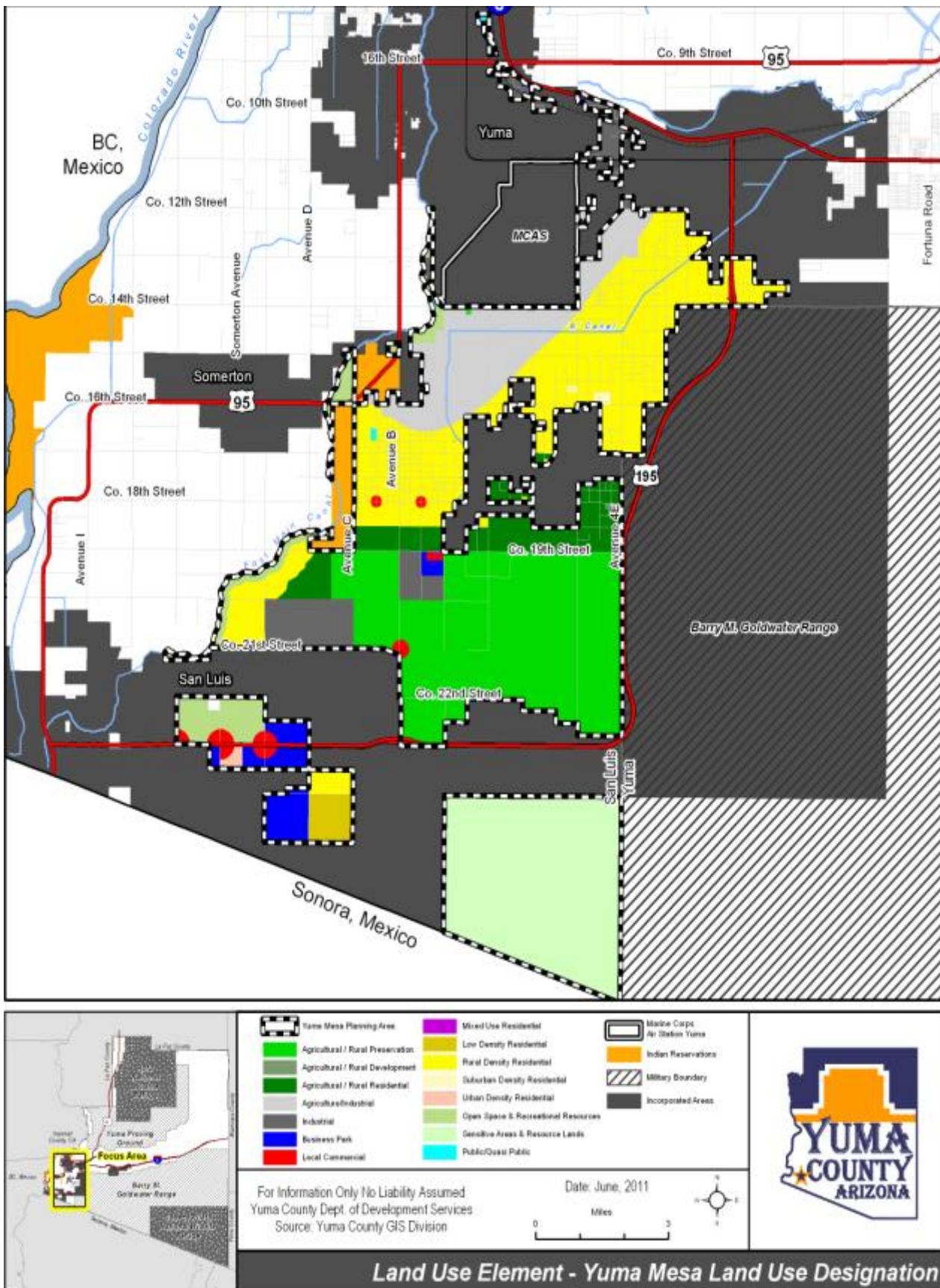
<p>Regional Commercial (C-RC)</p>	<ul style="list-style-type: none"> • A designation that allows for the full range of regional commercial activity. This designation is intended for large scale commercial enterprises that have region wide rather than a neighborhood customer base. Examples of this include the following: <ul style="list-style-type: none"> • Big box retail chains and other large retail stores; • High density business/office, wholesale trade, retail activities and commercial services; • Commercial building with a footprint larger than one acre.
<p>Open Space & Recreational Resources (OS/RR)</p>	<ul style="list-style-type: none"> • A designation that supports undeveloped areas providing visual and psychological relief from man-made development. • Resort commercial development (such as but not necessarily limited to the following: <ul style="list-style-type: none"> • Resorts, hotels, theme parks, tennis or golf resorts or camps, water parks and slides, conference centers, golf courses, exotic animal parks, parks, zoos or amphitheaters; • Areas available for public visitation and recreation with or without developed facilities and associated businesses such as dude ranches, off-road vehicle parks or trails, horse riding academies, horse stables and campgrounds; • Very low density residential (5 acre homesites); • Continued agricultural use.
<p>Sensitive Areas & Resource Lands (SA-RL)</p>	<ul style="list-style-type: none"> • A designation that supports areas that provide for opportunities for environmental conservation, maintenance and enhancement of ecological, aesthetic and/or cultural value: <ul style="list-style-type: none"> • Shall not be developed; Only publically owned land; • Wildlife, fishing and hunting areas; • Naturally hazardous areas.
<p>Transportation, Communications, & Utilities (TCU)</p>	<ul style="list-style-type: none"> • A designation that allows utility administrative and operational sites which serve the community or public need, and to protect these sites from encroaching incompatible uses.
<p>Public/Quasi- Public (P-QP)</p>	<ul style="list-style-type: none"> • A designation that supports publicly owned and operated facilities or those devoted to public use by governmental and quasi-public or non-profit entities including schools, churches, hospitals, military installations, government buildings, etc.

Land Use Element

Yuma County 2020 Comprehensive Plan



Land Use Element

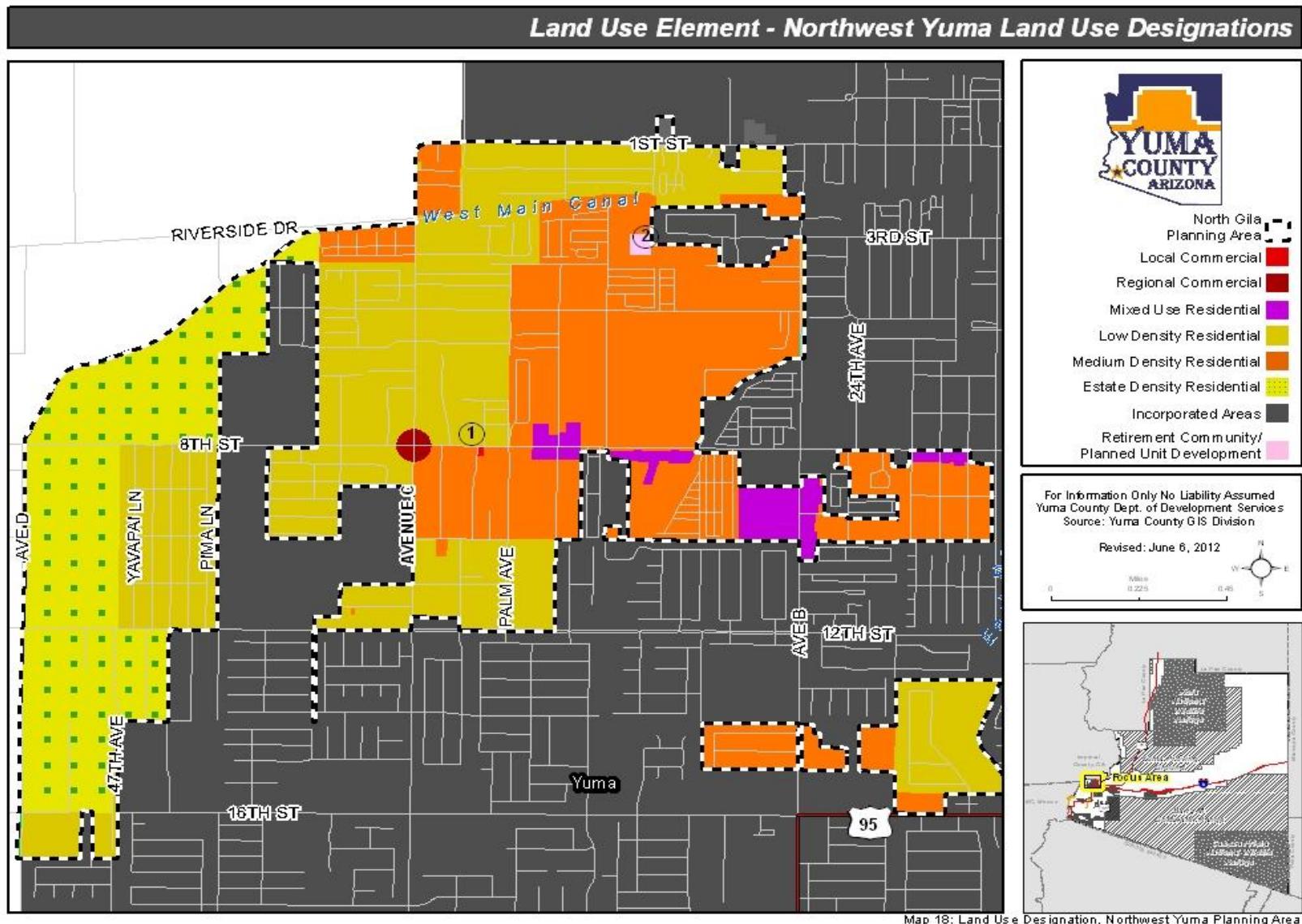


Map 17: Yuma Mesa Planning Area Land Use Designations

Land Use Element

Yuma County 2020 Comprehensive Plan

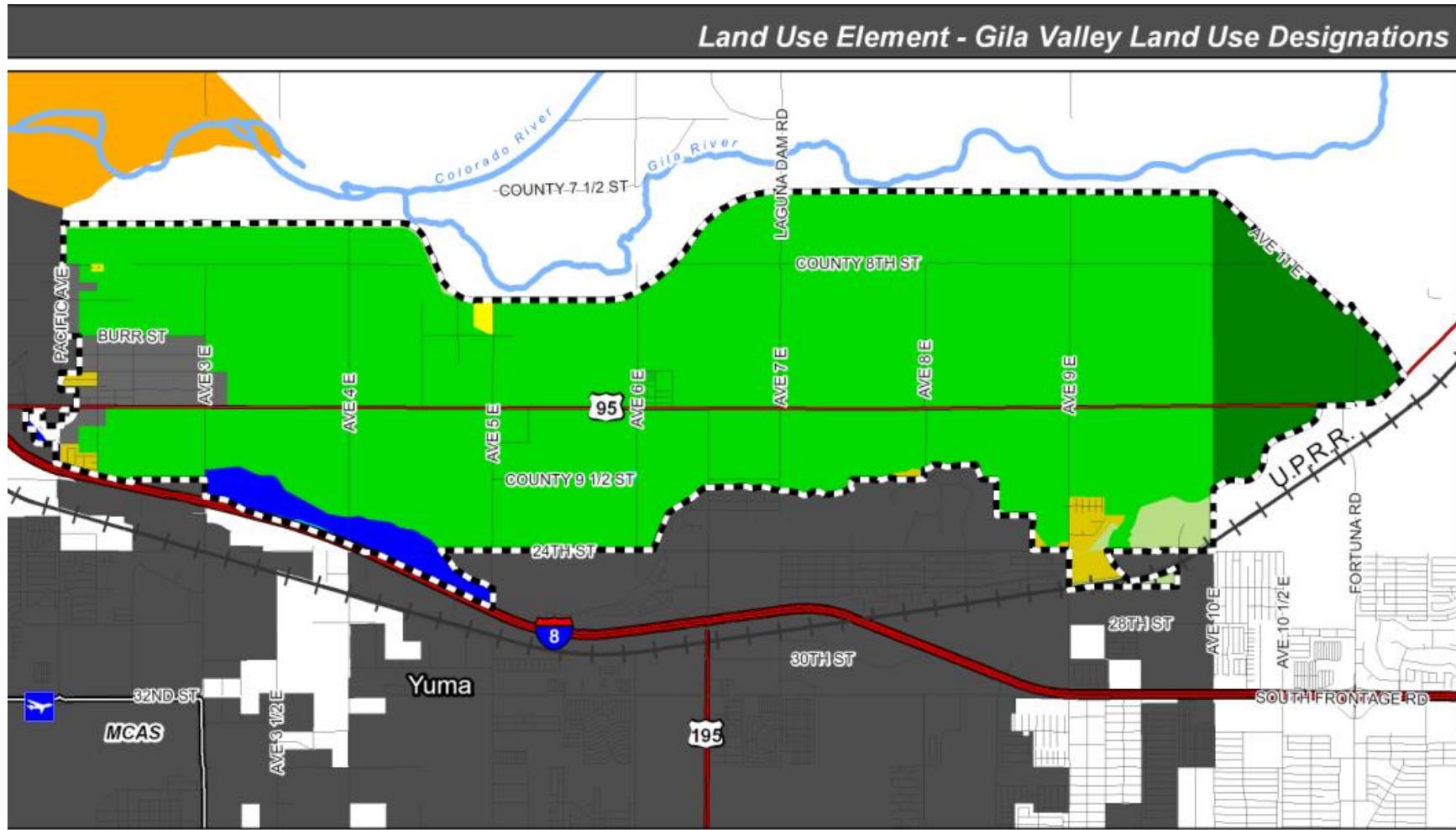
Map 18: Land Use Designation, Northwest Yuma Planning Area



Land Use Element

Yuma County 2020 Comprehensive Plan

Map 19: Land Use Designation, Gila Valley Planning Area

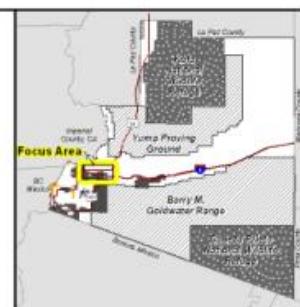
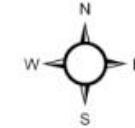


Gila Valley Planning Area	Rural Density Residential
Agricultural / Rural Residential	Urban Density Residential
Agricultural / Rural Preservation	Estate Density Residential
Industrial	Open Space & Recreational Resources
Business Park	Public/Quasi Public
Low Density Residential	Marine Corps Air Station Yuma
	Indian Reservations
	Incorporated Areas

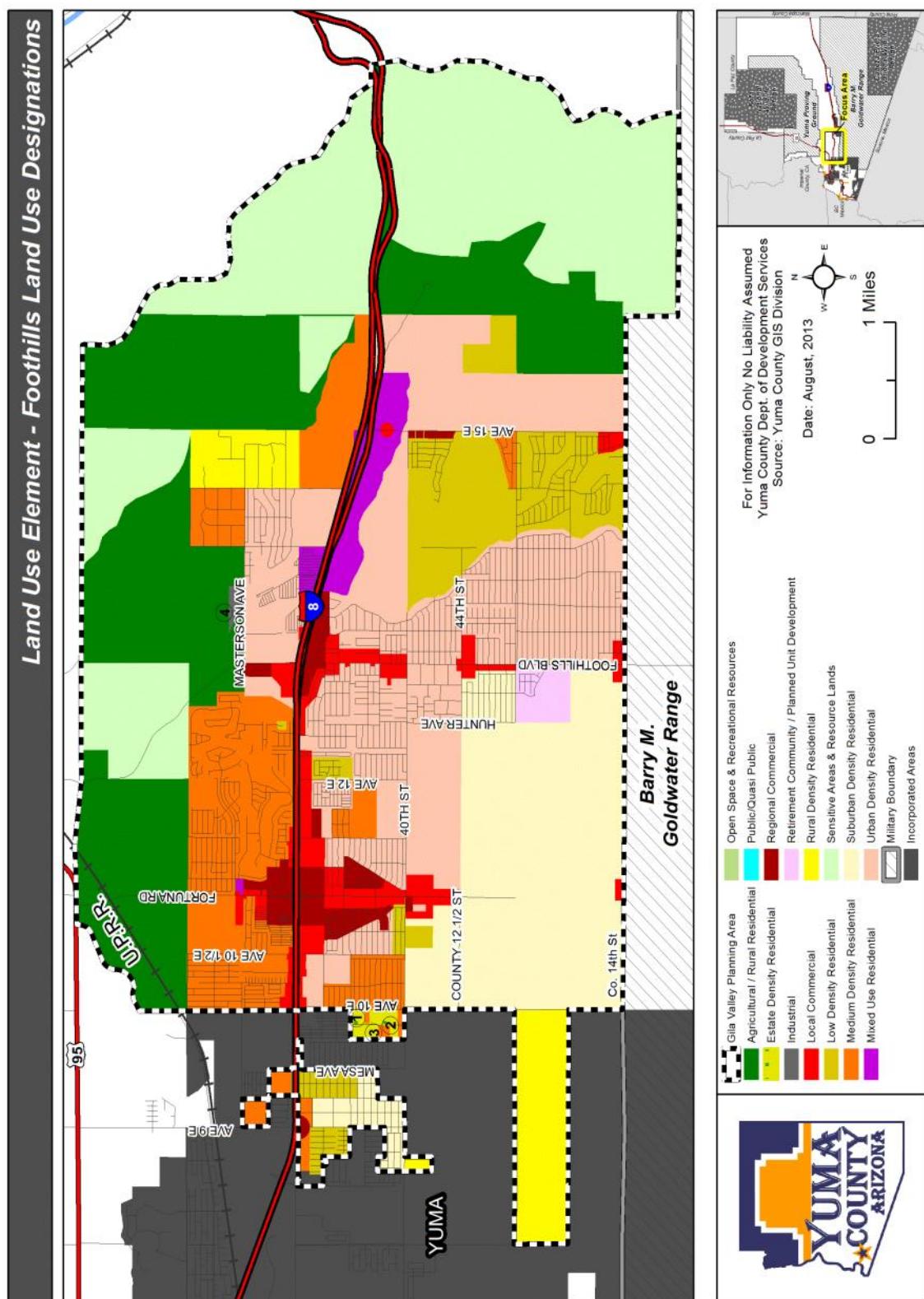
For Information Only No Liability Assumed
Yuma County Dept. of Development Services
Source: Yuma County GIS Division

Date: June, 2011

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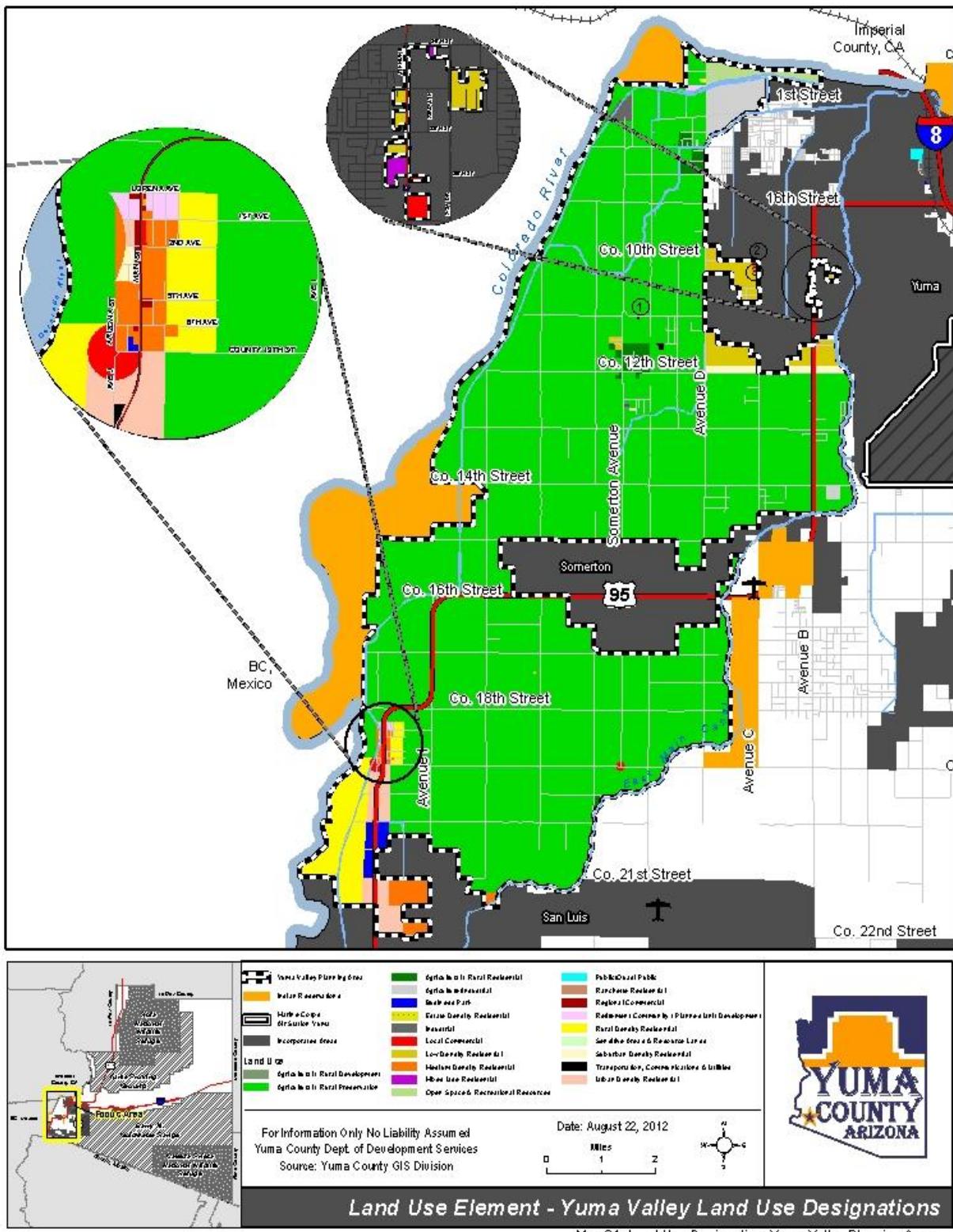


Land Use Element



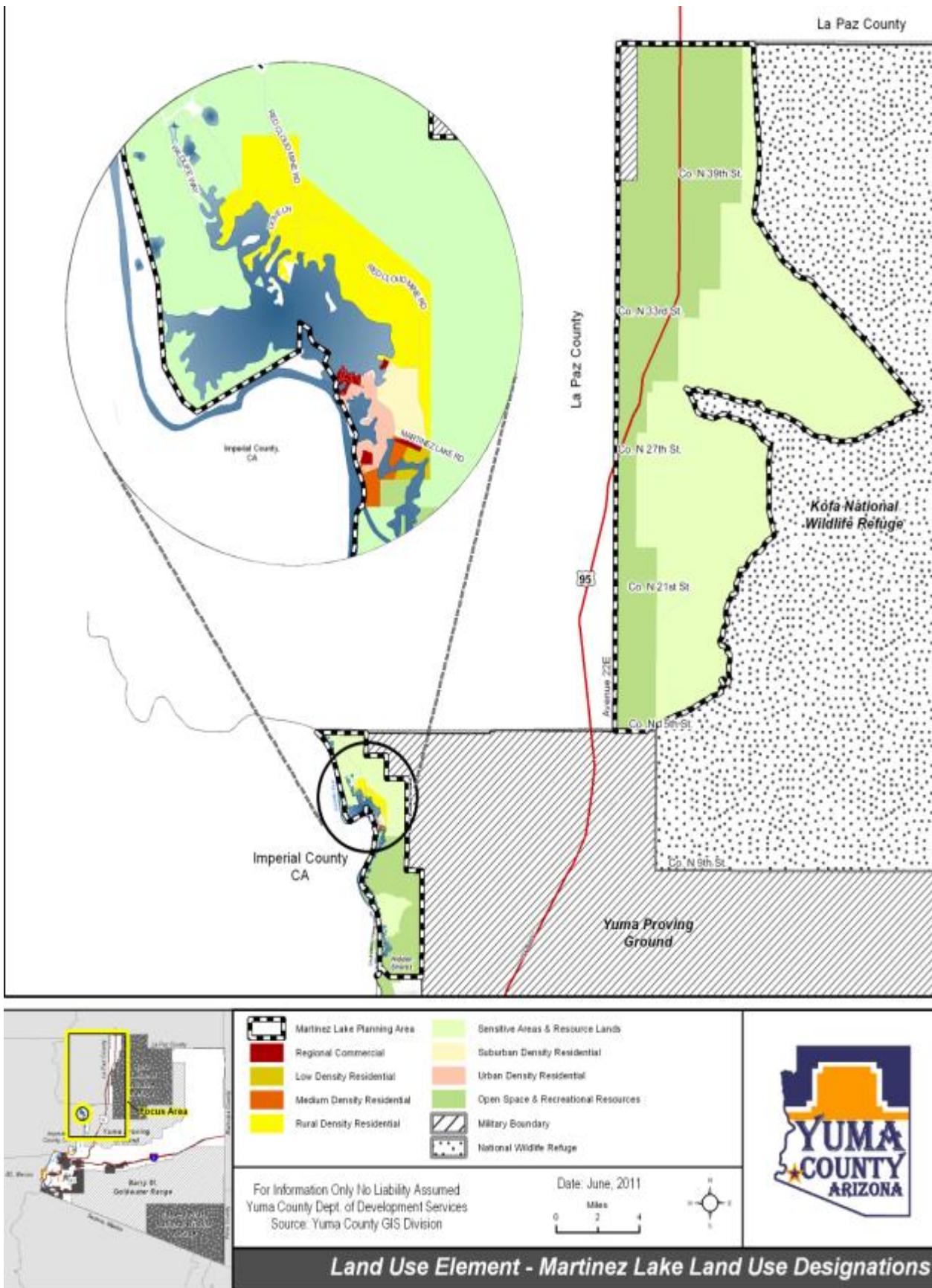
Map 20: Land Use Designation, Foothills Planning Area

Land Use Element



Map 21: Land Use Designation Yuma Valley Planning Area

Land Use Element

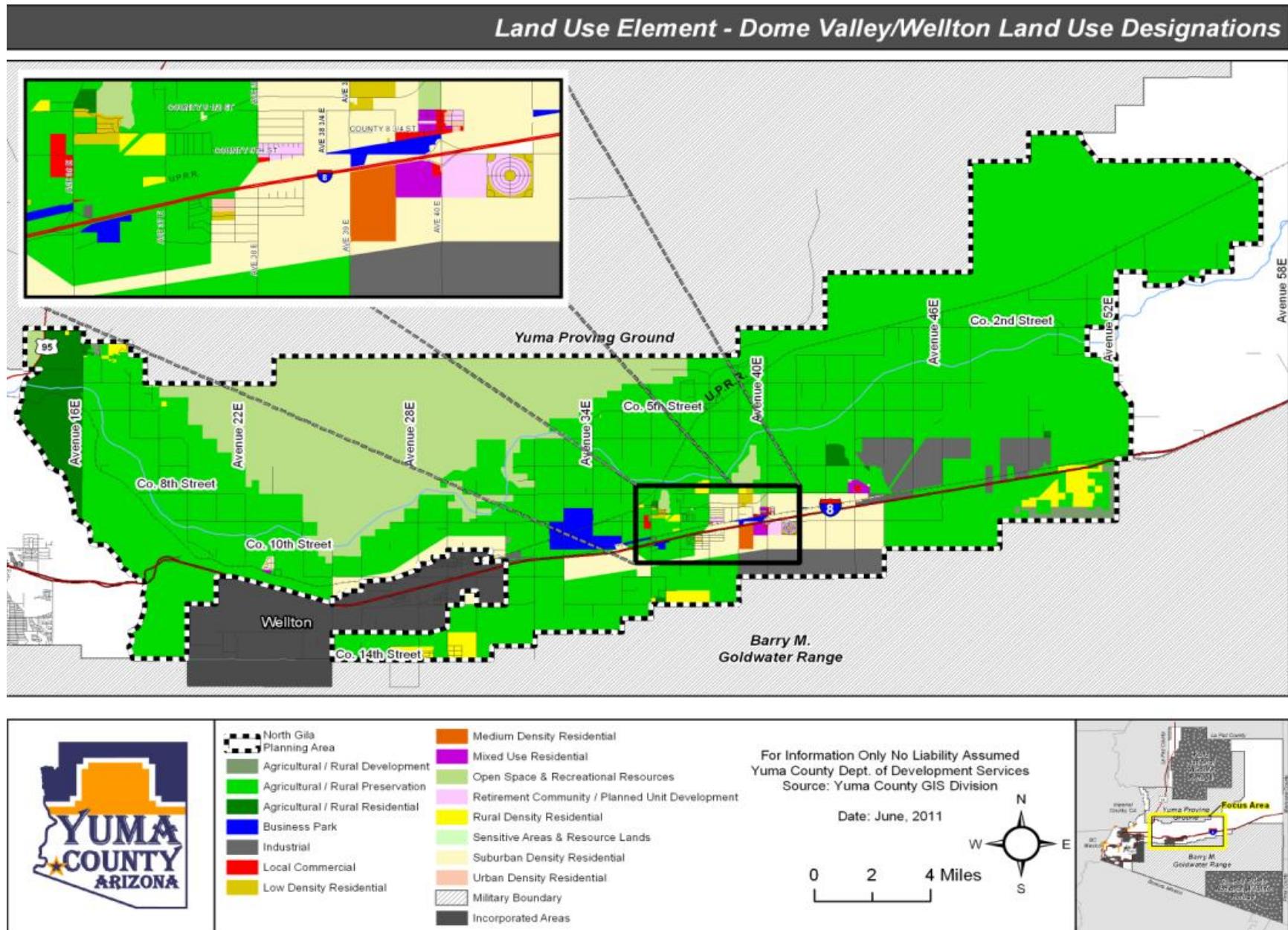


Map 22: Land Use Designation, Martinez Lake Planning Area

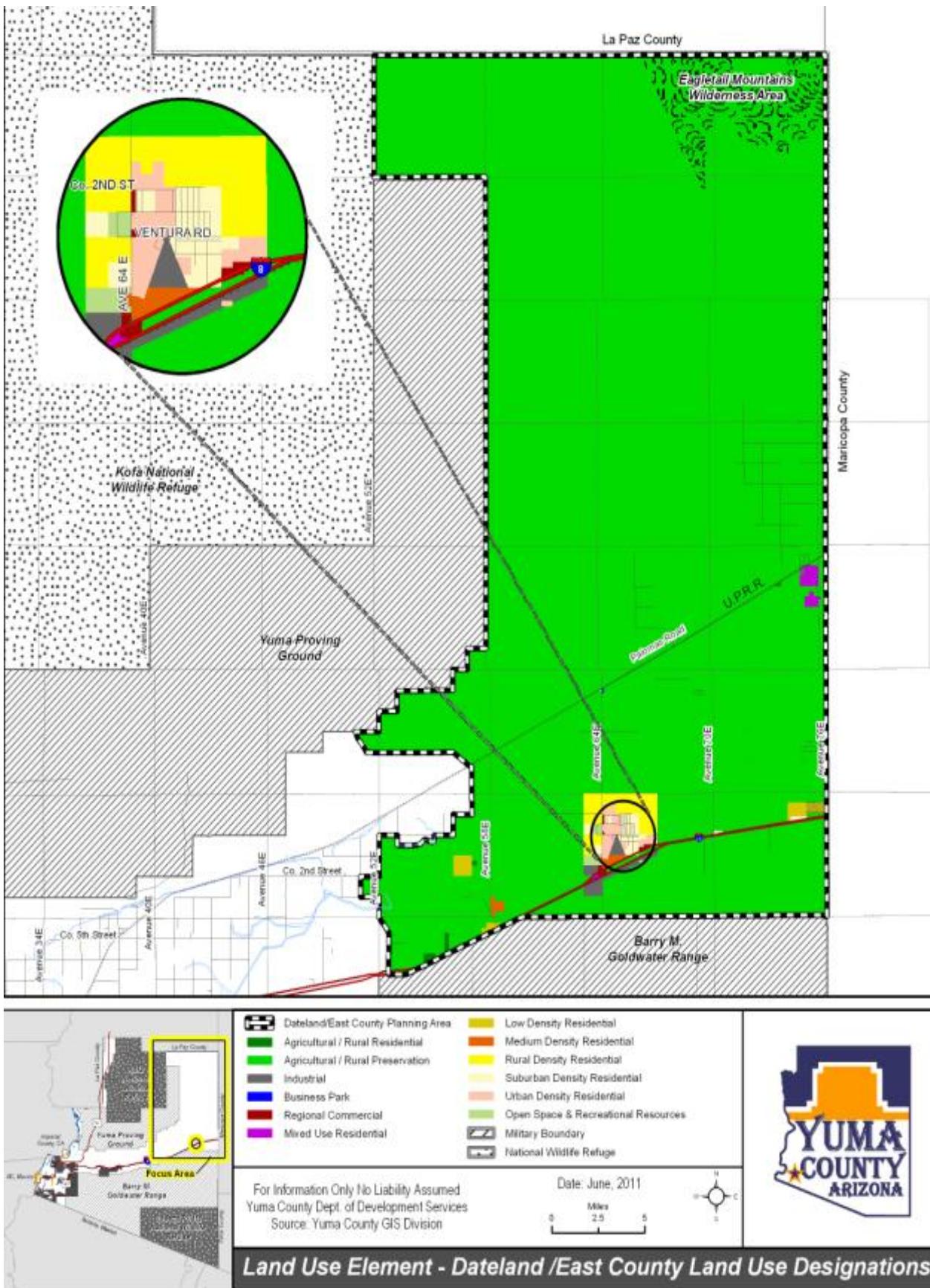
Land Use Element

Yuma County 2020 Comprehensive Plan

Map 23: Land Use Designation, Dome Valley/Wellton Planning Area



Land Use Element



Map 24 Land Use Designation, Dateland/East County Planning Area

3.3 Amendment Process and Criteria

Definition of a Major Amendment

A major amendment is an amendment to the Yuma County 2020 Comprehensive Plan that represents a substantial alteration of the county's land use mixture or balance as established in the Plan's land use element for that area of the county. A major amendment shall be required for any proposed project that is a substantial change to the goals, objectives and policies of the Comprehensive Plan, the intent or direction of the Comprehensive Plan or represents a substantial alteration of the county's land use mixture and balance established by the Comprehensive Plan. The following criteria determines whether a proposed amendment to the Comprehensive Plan is a major amendment.

Slope

Any proposed amendment on lands with 2/3 or more of the parcel net land area on a 12% slope is a major amendment.

Traffic Capacity

A proposed amendment is a major amendment if it would create a Level of Service (see below) of D, E or F on existing road or roads that will service the proposed amendment area. If such road is already rated at a D, E or F Level of Service, that proposed amendment is a major amendment if it further decreases the Level of Service (i.e. from D to E, D to F or from E to F)

A. Level of Service:

Level of Service (LOS) is the term used to describe the degree of traffic congestion on a roadway. The various Levels of Service which range from A to F are generally defined as follows:

- Level of Service A represents free flow.
- Level of Service B is in the range of stable flow but the presence of other users in the traffic stream begins to be noticeable.
- Level of Service C is in the range of stable flow but marks the beginning of the range in which the operation of individual users becomes significantly affected by others.
- Level of Service D represents high density but stable flow. Speed and freedom to maneuver are severely restricted and the driver or pedestrian experiences a generally poor level of comfort and convenience.
- Level of Service E represents operating conditions at or near the capacity level. All speeds are reduced to a low but relatively uniform value.
- Level of Service F is used to define forced or breakdown of flow. This condition exists wherever the amount of traffic approaching a point exceeds the amount which can traverse the point.

B. Deriving Level of Service:

The proposed Level of Service is derived by applying traffic count and capacity data into the following formula:

24 Hour Quarterly Traffic Count Report + Proposed Traffic Count Increase**Road Segment Capacities (Vehicles per Day)****X 100%**

The resultant figure will fall within one of the following Level of Service categories:

LOS A: 0.0 to 0.5**LOS B:** 0.51 to .63**LOS C:** 0.64 to 0.76**LOS D:** 0.77 to .88**LOS E:** 0.89 to 1.0**LOS F:** Greater than 1.0**C. Road Segment Capacities:**

Road Type	2 Lane	4 Lane	6 Lane
Interstate		80,000	120,000
Principal Arterial		36,000	54,000
Minor Arterial		32,400	
Rural Major Collector		29,160	
Rural Minor Collector	13,120		
Urban Collector	14,580		
Local	10,800		

Infrastructure Service Area Boundaries

Any proposed amendment that would trigger a change in infrastructure service area boundaries pursuant to A.R.S. §11-826 is a major amendment. Permissive until a plan is prepared and regulations determined for said boundaries by the Planning and Zoning Commission and adopted by the Board of Supervisors through resolution.

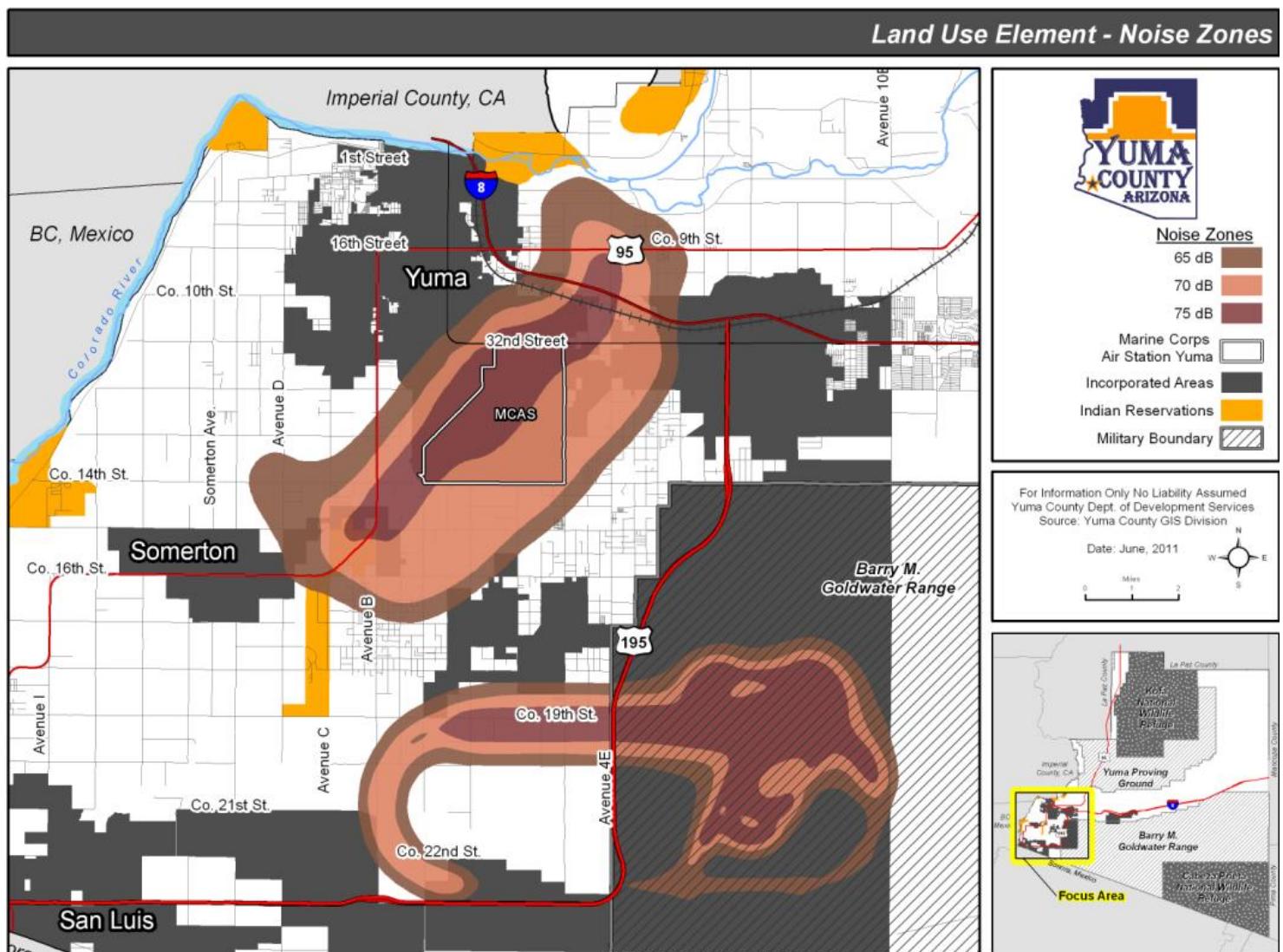
Water Resources

Any proposed amendment that would trigger inconsistency with the Yuma County 208 Water Quality Management Plan (Yuma County 208 Plan). The following actions are required to be consistent with the Yuma County 208 Plan:

- Build or expand a wastewater facility that discharges to surface water.
- Provide a grant or loan through the Water Infrastructure Finance Authority (WIFA).
- Build or expand a wastewater treatment facility or disposal system with combined flows over 24,000 gallons per day (gpd) or some facilities with flows between 3,000–24,000 gpd.

Yuma County Noise Exposure and Compatibility Overlay

Any proposed amendment that would trigger an increase in residential density or any other incompatible land uses and/or densities within the designated 65, 70 or 75 DNL (Day Night Level - average sound level over a 24 hour period) noise contours, as demonstrated in the Yuma County Noise Exposure and Compatibility Overlay Map. In accordance with A.R.S §28-8481, a proposed amendment that is located adjacent to Marine Corps Air Station Yuma/Yuma International Airport (MCAS-Yuma/YIA) or Auxiliary Airfield No. 2 (AUX-2) is a major amendment.



Map 25: Yuma County Noise Exposure and Compatibility Overlay Map

Major Change in Land Use Designation

A major amendment is required if a proposed amendment meets any of the following additional criteria:

- Loss of more than 10 acres of agricultural land
- Potential increase of 157 or more dwellings than would be permitted under the existing land use designation
- Increase of more than 8 acres of commercial space
- Increase of more than 20 acres of industrial space
- Loss of any land designated as Sensitive Areas and Resource Lands
- Loss of any land designated Open Space and Recreational Resource Lands

Major Amendment Process and Timeline

Application Intake <i>January 1 to June 15</i>	The deadline for submitting major amendment applications will be June 15 th . Initial staff review will take place, maps will be generated and analysis will begin.
Planning and Zoning Commission Releases For Comment - July	The Commission will officially release the major amendments for a 60 day period for public comment. (Any change to the amendment after this date restarts the process the following year.)
Public Information and Participation Process <i>60 Days</i>	The public release by Commission action of the major amendments is the beginning of the Public Information and Participation Process (PIPP). As part of the PIPP at least one neighborhood meeting will be held for each major amendment. The PIPP will last for a minimum of 60 days.
Staff Report	A staff report is prepared by incorporating feedback which is gathered during the PIPP.
Legal Notice <i>15 to 30 days prior to P&Z Meeting</i>	This requirement will be met by placing a display ad in the <i>Yuma Sun</i> newspaper. This ad will represent legal notice.
Special Planning and Zoning Commission Meeting <i>Must occur at least 75 days after the P&Z commission releases the amendments for comment)</i>	A special session of the Planning and Zoning Commission will be held at which all major amendment applications will be heard.
Legal Notice <i>15 to 30 days prior to Board of Supervisors Meeting</i>	This requirement will be met by placing a display ad in the <i>Yuma Sun</i> newspaper. This ad will represent legal notice.
Special Board of Supervisors Hearing <i>Prior to December 31 of the year the application was submitted</i>	A special session of the Board of Supervisors will be held at which all major amendments will be heard. The meeting will take place no later than December 31 st of the year in which the applications were submitted. As per A.R.S. §11-824(C) passage of a major amendment requires an affirmative vote of two-thirds of the members of the board.
Effective Date <i>30 days after Board of Supervisors Approval</i>	An approved major amendment does not take effect until 30 days after its approval. During this 30 day period it may be subject to a referendum as provided for in A.R.S. §11-824(C).

Definition of Minor Amendment

A minor amendment is any amendment that does not meet the criteria to be defined as a major amendment. A minor amendment may be heard in conjunction with a concurrent rezoning application.

Minor Amendment Process and Timeline

Application Intake <i>Continuously</i>	Applications for minor amendments are accepted on a continuous basis. An application for a rezoning that is dependent on approval of a minor amendment may be filed and heard jointly with a minor amendment.
Staff Report	A staff report containing analysis of the case and a staff recommendation will be prepared.
Legal Notice <i>15 to 30 days prior to P&Z Meeting</i>	This requirement will be met by placing an ad in the <i>Yuma Sun</i> newspaper.
Planning and Zoning Commission Meeting <i>6 to 8 weeks after application acceptance</i>	A minor amendment will be scheduled for the earliest regularly scheduled Planning and Zoning Commission meeting that has available space on the agenda, allows for all required notification requirements to be met and completion of a staff report. A minor amendment will be heard by the Planning and Zoning Commission approximately 6 to 8 weeks after it is accepted.
Legal Notice <i>15 to 30 days prior to Board of Supervisors' Meeting</i>	This requirement will be met by placing an ad in the <i>Yuma Sun</i> newspaper.
Board of Supervisors' Hearing <i>6 to 8 weeks after the Planning and Zoning Commission Meeting</i>	A minor amendment will be scheduled for a Board of Supervisors hearing after the Planning and Zoning Commission meeting. A minor amendment takes effect immediately upon approval by the Board of Supervisors.

Criteria for Amending the Land Use Designation Maps

Changing circumstances can lead to a need and/or desire to make changes to the land use element and the maps which are associated with it. For this reason the land use designation maps contained within the Yuma County 2020 Comprehensive Plan can be altered through the major or minor amendment process.

When an amendment to change a land use designation map is submitted, it is judged on criteria contained in the *Yuma County 2020 Comprehensive Plan* to determine if the proposed change is an improvement to the land use pattern of the planning area and helps achieve or not run contrary to the goals and objectives of the Comprehensive Plan. In order for a proposed amendment to be presented to the Planning and Zoning Commission with a staff recommendation of approval a proposed amendment must comply with all established criteria.

The following criteria are countywide criteria and apply to all portions of unincorporated Yuma County. They represent six overall policies on which consensus has been reached at a regional level.

- Coordinated and Compatible Planning
- Concentrated and Urban Development
- Military and General Aviation Preservation
- Valley Agricultural Preservation
- Industrial and Commercial Development
- Rural Development and Lifestyle Preservation
- Conservation of fish and wildlife populations, habitats, and associated recreation opportunities.

These six overall policies are shared by the cities of San Luis, Somerton, Yuma, the Town of Wellton and Yuma County and are reflected in the jointly developed and adopted *Yuma Regional Development Plan*.

The nine planning areas that comprise unincorporated Yuma County are extremely diverse. They range from an urbanized area that is comparable in size and scope to a mid-sized city, areas of intense and bountiful agricultural production, remote desert outposts, areas of two to five acre ranchettes, retirement communities and a community that is mostly composed of vacation homes. No single set of criteria could cover all land use needs, issues and desires of such a diverse group of areas. It is for this reason that the unincorporated portions of Yuma County are divided into nine planning areas. Each planning area represents a portion of unincorporated Yuma County that has common land use patterns and issues.

For each planning area a Citizen Advisory Group composed of planning area residents came to a consensus on what the land use pattern of the planning area should be established for, in addition to the countywide criteria, for future land use changes in that planning area. These planning area specific criteria will be used in conjunction with the countywide criteria in developing recommendations for proposed changes in land use designations. They are contained in the following subsection of this element.

North Gila Planning Area Policies and Priorities

- NG.1:** Any future residential development needs to occur in a manner that is compatible with existing agricultural land use in the planning area and is consistent with the rural nature of existing residential development.
- NG.2:** No additional development should be allowed that would use County 6th Street east of Laguna Dam Road until County 6th Street is upgraded to provide safe and adequate access for both current and future uses.
- NG.3:** Prevent residential encroachment on existing industrial uses, particularly sand and gravel mining operations and provide for the expansion of such uses (sand and gravel mining operations) in the future.
- NG.4:** The Gila Gravity Main Canal which runs through the planning area is of vital importance to Yuma County as it provides water for agricultural and residential use for a large portion of the County. In order to protect this vital resource an adequate buffer should be established between the Gila Gravity Main Canal and any future development.
- NG.5:** Encourage appropriate buffers to mitigate conflicting land uses, including between aggregate mining and residential land use.
- NG.6:** Pursuant to state law, preserve currently identified aggregates sufficient for future development.
- NG.7:** Encourage the conservation and enhancement of open space and sensitive wildlife habitats.

Yuma Mesa Planning Area Policies and Priorities

- YM.1:** Retention of the planning area's rural character and agriculture activity.
- YM.2:** In order to maintain the current agricultural compatible rural style of development and provide protection for military, land use designations that support lots two to five acres in size should be maintained.
- YM.3:** Commercial or industrial development should be limited in scope and compatible with the rural residential nature of the planning area.
- YM.4:** Consider water resource availability in all land use decisions and development proposals.
- YM.5:** Coordinate availability of irrigation water for residential and agriculture parcels with more than one acre in size.
- YM.6:** Encourage appropriate buffers to mitigate conflicting land uses, including between aggregate mining and residential land use.
- YM.7:** Pursuant to state law, preserve currently identified aggregates sufficient for future development.
- YM.8:** Encourage the conservation and enhancement of open space and sensitive wildlife habitats.

Northwest Yuma Planning Area Policies and Priorities

- NWY.1:** All new development should be consistent with the existing character of the planning area.
- NWY.2:** Expansion of commercial and mixed use activities along 8th Street between Avenue C and the Thacker Lateral Canal is desirable.
- NWY.3:** Economic development should be a key consideration when any decision regarding land use is made.
- NWY.4:** Restrict development along 5th Street to no more than one dwelling unit per acre.
- NWY.5:** Areas in the Avenue B&C Colonia that are currently designated Medium Density Residential would be more appropriately designated Low Density Residential.
- NWY.6:** Encourage appropriate buffers to mitigate conflicting land uses including between aggregate mining and residential land use.
- NWY.7:** Pursuant to state law, preserve currently identified aggregates sufficient for future development.
- NWY.8:** Encourage the conservation and enhancement of open space and sensitive wildlife habitats.

Gila Valley Planning Area Policies and Priorities

- GV.1:** Properties along 8th Street, east of Pacific Avenue, should be kept agriculture or semi-rural so that future land uses are compatible with the surrounding environment.
- GV.2:** Limit commercial development to the Pacific Avenue commercial corridor between 8th Street and Interstate 8. The transition of some land currently designated as industrial to commercial is acceptable.
- GV.3:** Land use designations should support existing residential densities, but not encourage expansion into areas and/or land currently being used for agricultural purposes.
- GV.4:** Encourage appropriate buffers to mitigate conflicting land uses, including between aggregate mining and residential land use.
- GV.5:** Pursuant to state law, preserve currently identified aggregates sufficient for future development.
- GV.6:** Encourage the conservation and enhancement of open space and sensitive wildlife habitats.

Foothills Planning Area Policies and Priorities

- F.1:** Expansion of commercial development beyond Fortuna Road, Foothills Boulevard and Frontage Road corridors.
- F.2:** Encourage the development of small business by providing an adequate supply of land classified for small scale commercial usage.
- F.3:** New residential development should be of a density that is compatible with the existing density of development in the Foothills area.
- F.4:** New residential development should occur in a manner that enhances park and recreation opportunities.
- F.5:** Future residential development should not cause the quality of life of Foothills residents to decline.
- F.6:** Residential development should not outpace the development of infrastructure to support it.
- F.7:** A lower density of residential development in the Foothills is desired.
- F.8:** The impact on water supply and sewage treatment systems will be specifically analyzed and taken into account when considering any future land use designation change.
- F.9:** Certain state and federal lands, particularly in the immediate vicinity of the Gila Mountains, should be preserved as open space.
- F.10:** Encourage appropriate buffers to mitigate conflicting land uses, including between aggregate mining and residential land use.
- F.11:** Pursuant to state law, preserve currently identified aggregates sufficient for future development.
- F.12:** Consideration given to the preservation of the BMGR.
- F.13:** Encourage the conservation and enhancement of open space and sensitive wildlife habitats.

Yuma Valley Planning Area Policies and Priorities

- YV.1:** Areas in which rural style residential development has already occurred, such as in the Drysdale or Wall Lane areas, will be supported by land use designations that do not significantly expand or intensify existing residential usages.
- YV.2:** No change in land use designation shall be supported unless it is demonstrated that the infrastructure needed to support any future development that would result for the new land use designation will be in place.
- YV.3:** Commercial and/or industrial corridors along transportation corridors are supported with particular emphases on Highway 95 running through Gadsden.
- YV.4:** Encourage appropriate buffers to mitigate conflicting land uses, including between aggregate mining and residential land use.
- YV.5:** Pursuant to state law, preserve currently identified aggregates sufficient for future development.
- YV.6:** Encourage the conservation and enhancement of open space and sensitive wildlife habitats.

Martinez Lake Planning Area Policies and Priorities

- ML.1:** During the process to approve new development in the Martinez Lake area, Yuma County will require developers to assure that adequate sewer service or another acceptable alternative means of wastewater treatment is provided, will ensure that there is sufficient capacity to adequately serve the new development and the additional load will not degrade service to existing residents.
- ML.2:** Low-lying marshy areas along Martinez Lake should be left in a natural state.
- ML.3:** Encourage appropriate buffers to mitigate conflicting land uses, including between aggregate mining and residential land use.
- ML.4:** Pursuant to state law, preserve currently identified aggregates sufficient for future development.
- ML.5:** Encourage the conservation and enhancement of open space and sensitive wildlife habitats.

Dome Valley/Wellton Planning Area Policies and Priorities

- DVW.1:** Limited, planned residential growth and development in the area is supported. However, the preservation of the traditional local agricultural industry and feed lots, as well as the enhancement of its productivity, is critical. New residential and Industrial growth should not encroach on existing agricultural activities in a manner to create a detrimental impact to either use.
- DVW.2:** Industrial growth should be encouraged to take place in a manner that is complementary with surrounding land use and infrastructure.
- DVW.3:** Clustering of industrial development will be encouraged in order to take advantage of economies of scale and reduce the demand for new infrastructure improvements.
- DVW.4:** Lands contiguous to the Gila, Mohawk or Muggins Mountains shall be considered for preservation of open space if the land in question is owned by a government agency or the private land owner consents to such a designation.
- DVW.5:** Encourage appropriate buffers to mitigate conflicting land uses, including between aggregate mining and residential land use.
- DVW.6:** Pursuant to state law, preserve currently identified aggregates sufficient for future development.
- DVW.7:** Provide protection along the BMGR boundary with limited residential development.
- DVW.8:** Encourage the conservation and enhancement of open space and sensitive wildlife habitats.

Dateland/East County Planning Area Policies and Priorities

- DEC.1:** Economic development will be a key consideration when considering any future change in land use designations.
- DEC.2:** Promote the construction of solar or wind power plants.
- DEC.3:** New residential development should occur in proximity to existing residential development.
- DEC.4:** Land use designation should promote viable levels of agricultural production and encourage the development of an aquaculture industry.
- DEC.5:** Encourage appropriate buffers to mitigate conflicting land uses, including between aggregate mining and residential land use.

- DEC.6:** Pursuant to state law, preserve currently identified aggregates sufficient for future development.
- DEC.7:** Encourage the conservation and enhancement of open space and sensitive wildlife habitats.

Section Four—Open Space Element

4.1 Introduction

There are many ways that open space can be defined, but the following definition of open space is the one used in the *Yuma County 2020 Comprehensive Plan*. Open space is defined *as any publicly owned and publicly accessible space or area characterized by great natural scenic beauty or whose existing openness, natural condition or present state of use, if retained, would maintain or enhance the conservation of natural or scenic resources.*

Arizona Revised Statutes §11-821(D)(1) requires that an open space element contained in a comprehensive plan have the following components: A comprehensive inventory of open space areas, recreational resources and designation of access points to open space areas and resources; an analysis of forecasted needs, policies for managing and protecting open space areas and resources and implementation strategies to acquire open space areas and further establish recreational resources; and policies and implementation strategies designed to promote a regional system of integrated open space and recreational resources and a consideration of any existing regional open space plan.

A rich variety of open spaces exists within Yuma County. Only a very small portion of the County is urbanized and over 91% of the unincorporated Yuma County is publicly owned. Much of the federally owned land and a small portion of state owned land in Yuma County is specifically designated and managed as open space areas. A comprehensive inventory of these designated open space areas as required under ARS §11-821(D)(1)(a) is contained in this element. Maps showing the location of publicly owned land and designated open space can be found on pages four (4) and five (5) of this element. These designated open space areas are managed by a diverse array of federal and state agencies including the U.S. Fish and Wildlife Service, the Bureau of Land Management, the Bureau of Reclamation, the Arizona Game and Fish Department (AGFD) and the Arizona State Land Department (ASLD).



Open space near the Gila Mountains

Open Space Element

The federal government is the largest land owner in unincorporated Yuma County. Most of the federal lands are administered by four agencies that cover large areas with varying degrees of public access which range from closed to limited access. These four agencies have diverse missions and are: the Yuma Proving Ground (YPG), Barry M. Goldwater Range (BMGR), Kofa National Wildlife Refuge and Cabeza Prieta National Wildlife Refuge. Nearly all of the remaining 341,581 acres is managed by the Bureau of Land Management (BLM). The portion of federally owned land managed by the BLM is particularly important to Yuma County residents. The BLM administers large portions of the open space near urbanized areas including mountainous and riparian areas that are valued by County residents for multiple uses. The BLM's plan on how this land is to be managed is set forth in the Yuma Field Office Approved Resource Management Plan (RMP) which was completed in January 2010.

The purpose of the RMP is to establish management directions for the balanced uses of land under the management of the BLM including: rangeland, wildlife, wilderness, recreation, cultural resources and other natural, scenic, scientific and historical values. This RMP consolidated previous plans and guides the overall management of activities as well as the use and protection of BLM managed lands. The RMP is the framework for future planning and decision making on BLM managed lands.

The Arizona State Land Department (ASLD) manages a significant amount of land in the form of State Trust Land scattered throughout the County including many parcels close to or in key urban, mountainous or riparian areas. In total, the ASLD manages 317 square miles of unincorporated Yuma County. This total does not include the approximately 305 square miles of State Trust Land that is located within the boundaries of Kofa National Wildlife Refuge, YPG and the BMGR and are managed as part of these entities. State Trust Land is managed in a much different way than nearly all other forms of land owned by the government.

State Trust Lands are managed by the ASLD under mandate from the Arizona Constitution to achieve the highest and best use of the land in order to maximize revenues to the trust's beneficiaries, which include the public schools, prisons and other public entities. Management of State Trust Land differs from lands under the management of the Bureau of Land Management as State Trust Lands are managed solely for the benefit of the trust beneficiaries, as opposed to being managed for the benefit of and use by the public.

All recreational users of State Trust Land, except licensed hunters and fishermen who are actively pursuing game or fish in-season, are required to obtain a recreational use permit from the ASLD. A recreational use permit grants limited privileges to use State Trust Land for some recreation such as hiking, horseback riding, picnics, bicycling, photography, camping, sightseeing and bird watching. Camping is restricted to no more than fourteen days per year. Off-highway vehicular travel on State Trust Land is not permitted without proper licensing. Lands leased for agriculture, mining, commercial or military purposes are not open to recreational use. Other State Trust Lands may be closed to some or all recreational uses due to hazardous conditions or dust abatement in coordination with the Arizona Game and Fish Department or based on certain state, county or local laws or ordinances.

Open Space Element

Important economic activities that occur on State Trust Lands and other lands found in Yuma County are hunting and fishing. It is hard overstate the importance of both hunting and fishing to Yuma County's economy. Based data from a 2002 report from the Arizona Game and Fish Department, hunting and fishing expenditures in Yuma County for the year 2001 were 34.2 million dollars. The total multiplier effect of these activities was estimated at 42.0 million dollars.¹

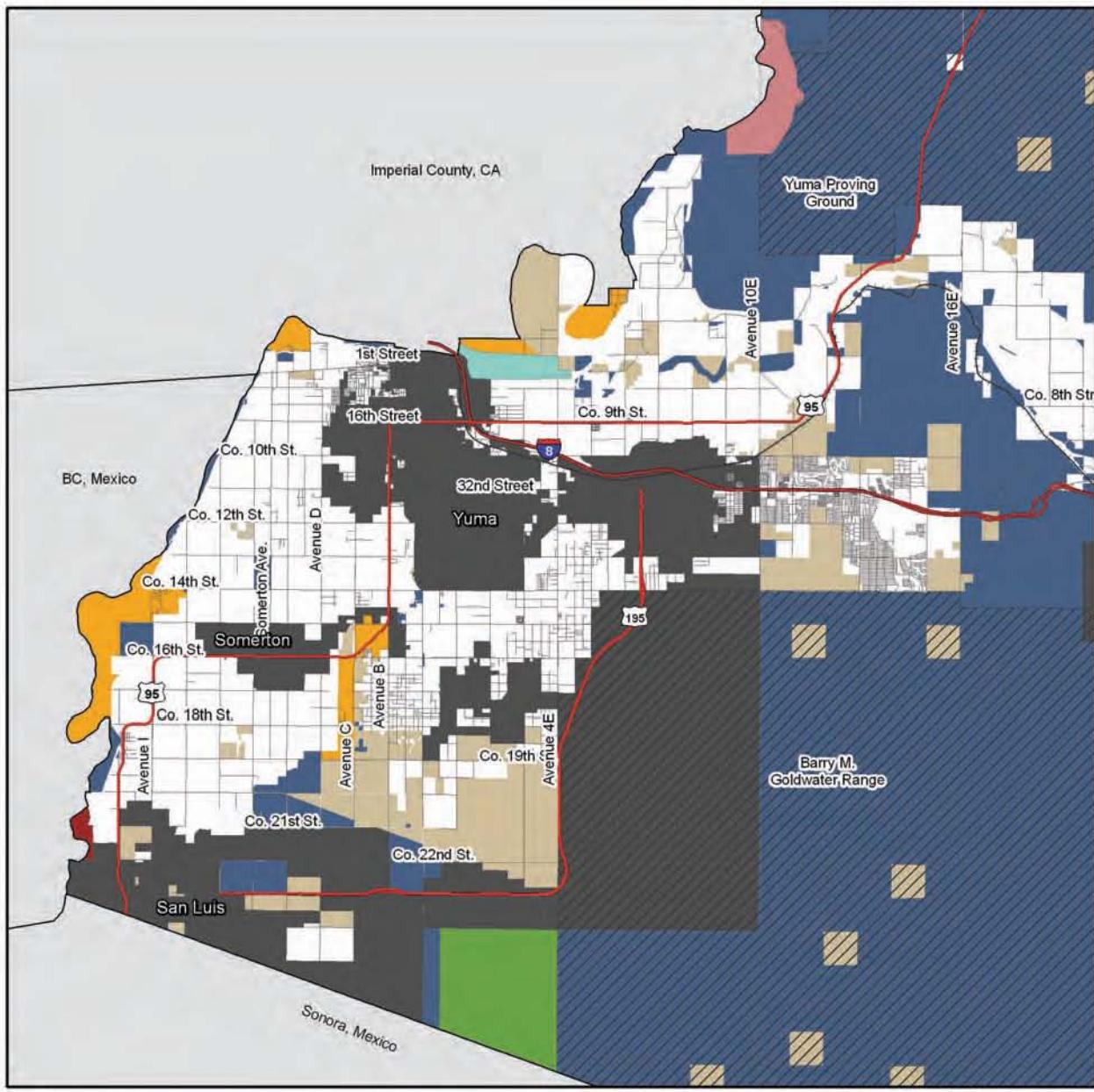
During the public outreach process that led to the development of the *Yuma County 2020 Comprehensive Plan*, Yuma County residents identified several areas of publicly owned open space where current patterns of usage were causing a degradation of the health, safety and welfare of nearby residents and land owners. The Open Space Element identifies these areas of concern and how residents would like to see these issues addressed and are located under Section 4.3 of this Element.

The Open Space Policies and Priorities contained within the *Yuma County 2020 Comprehensive Plan* are derived from comments and feedback from residents across the County. They represent the policy positions and priorities of Yuma County regarding open space within unincorporated Yuma County. All official actions taken by Yuma County regarding open space should be in harmony with these policies and priorities. Furthermore, when other agencies request Yuma County's comment or recommendation on any open space management policy or project, Yuma County's response will reflect as much as possible these policies and priorities.

Open Space Actions are the specific actions that Yuma County will take to advance the adopted Open Space Policies and Priorities.

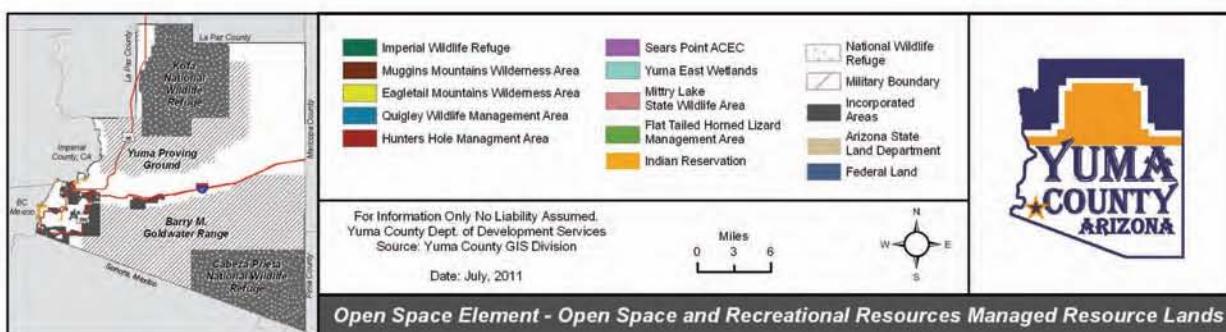
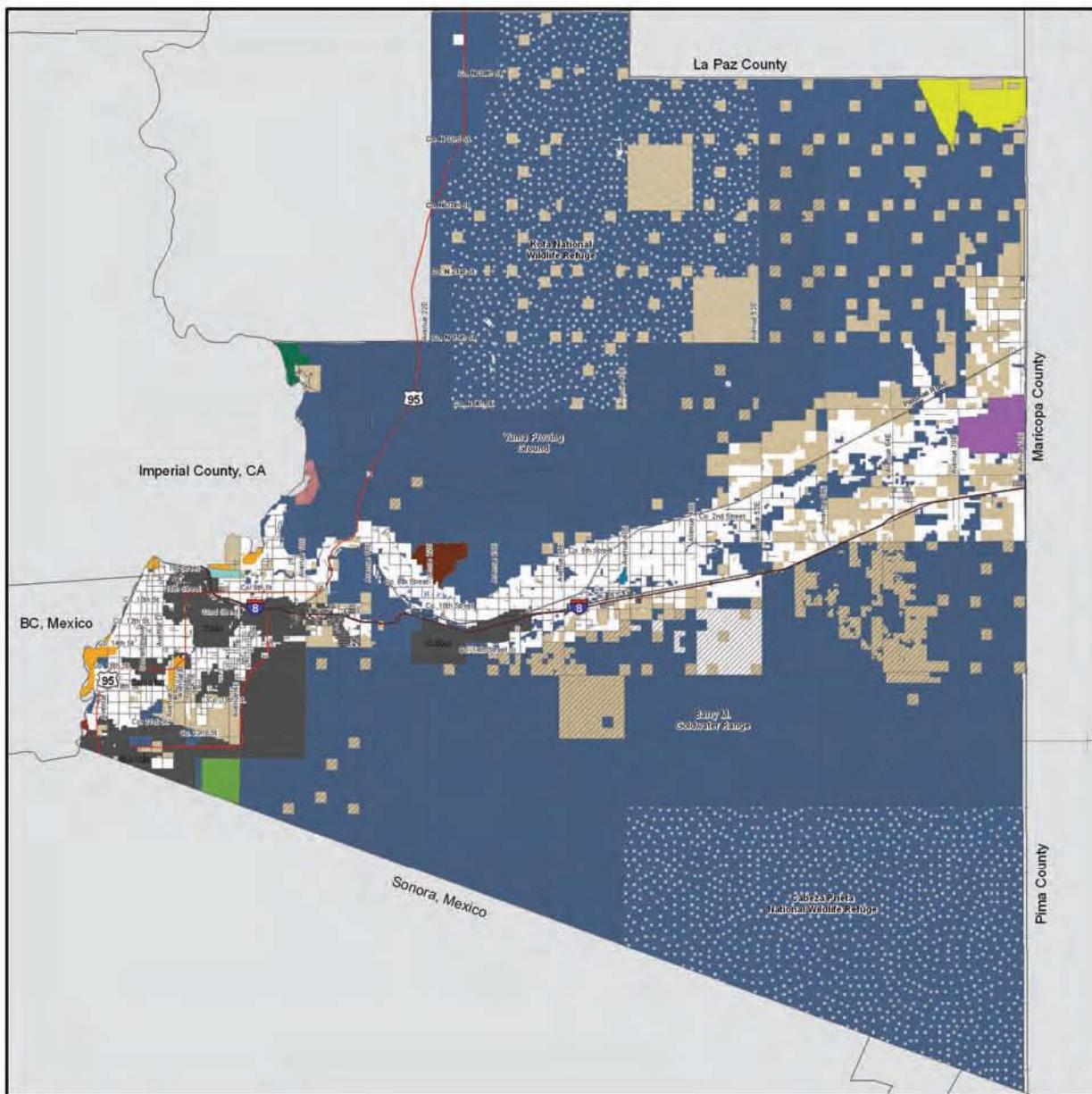
¹ p. 10, *The Economic Importance of Fishing and Hunting*, a study prepared by Jonathan Silberman, PhD., Arizona State University, 2002 for the Arizona Game and Fish Department.

Open Space Element



Map 1: Government and Managed Resource Lands (Western Yuma County)

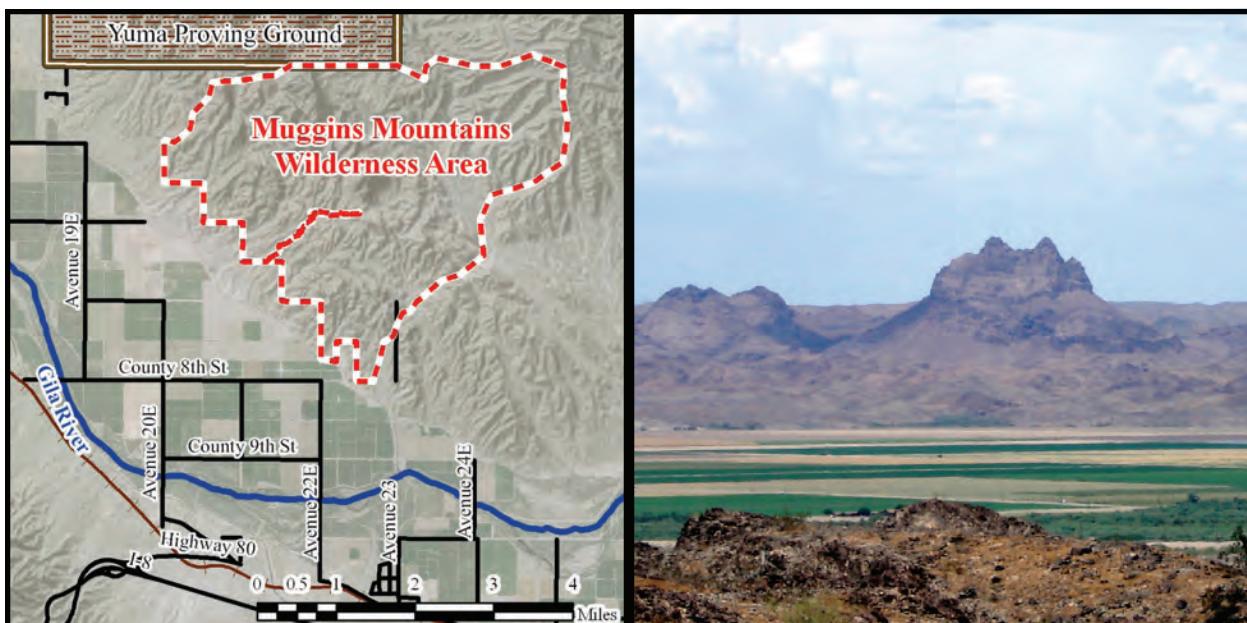
Open Space Element



Map 2: Open Space and Recreational Resources Managed Resource Lands

4.2 Open Space Inventory

The Muggins Mountains Wilderness Area and the Eagletail Mountains Wilderness Area, established by an act of Congress, are federal lands managed by the Bureau of Land Management. The Wilderness Act of September 3, 1964, defines wilderness areas as: “.... an area of undeveloped Federal land retaining its primeval character and influence, without permanent improvements or human habitation, which is protected and managed so as to preserve its natural conditions and which (1) generally appears to have been affected primarily by the forces of nature, with the imprint of man’s work substantially unnoticeable (2) has outstanding opportunities for solitude or a primitive and unconfined types of recreation.....”. Recreation such as backpacking, day hiking, sightseeing, photography and rock climbing are permitted within the wilderness areas.



Muggins Mountains Wilderness Area

Muggins Mountains Wilderness Area

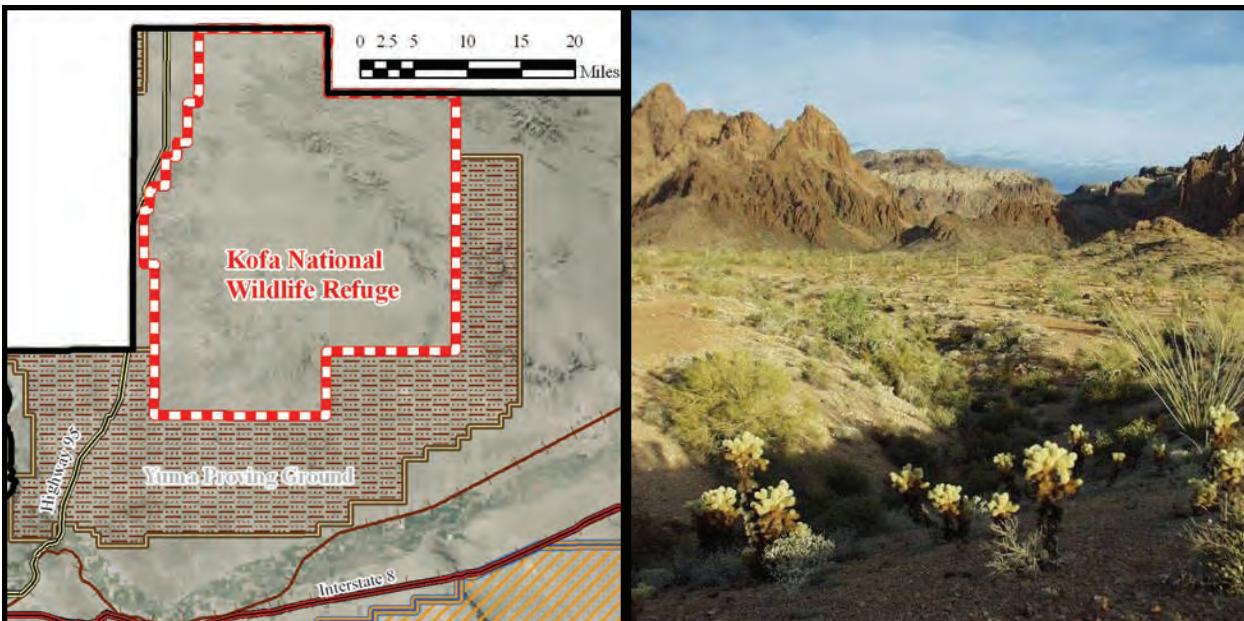


Eagletail Mountains Wilderness Area

Eagletail Mountains Wilderness Area

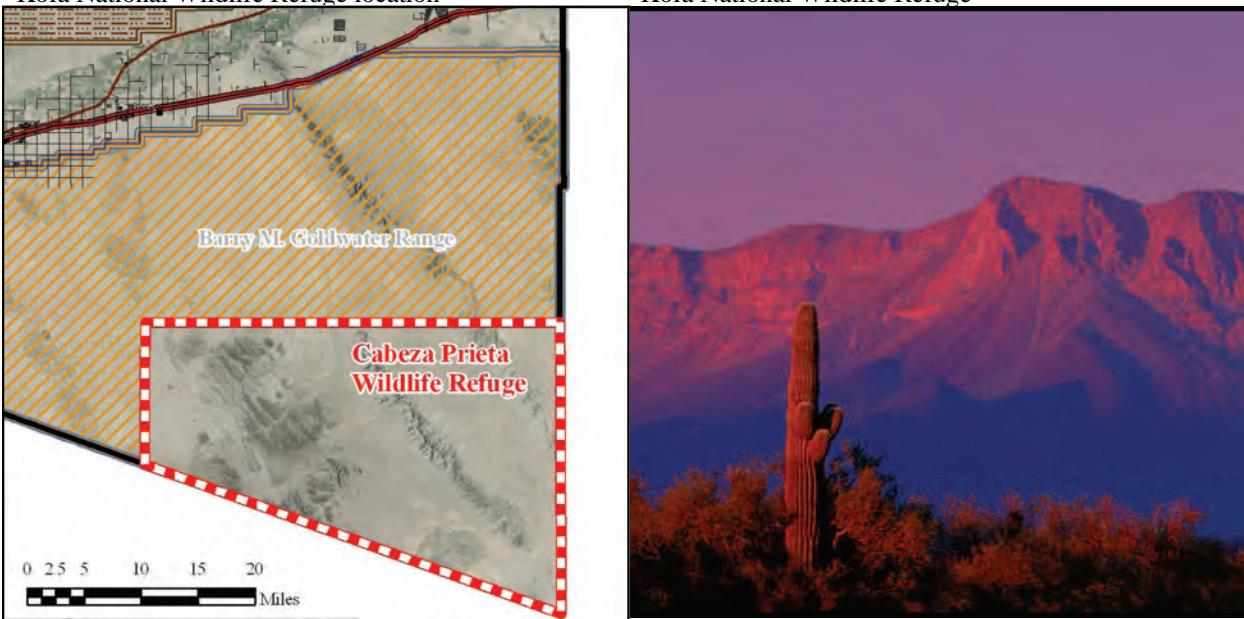
Open Space Element

The Kofa National Wildlife Refuge was established in 1939. The refuge encompasses 665,400 acres of pristine desert that is home to the desert bighorn sheep and the California fan palm, the only native palm trees in Arizona which are tucked away in narrow, rugged canyons on the refuge. Hiking, sightseeing, photography and nature observation are permitted in all areas of the refuge except on patented mining claims and other private in-holdings.



Kofa National Wildlife Refuge location

Kofa National Wildlife Refuge²



Cabeza Prieta National Wildlife Refuge Location

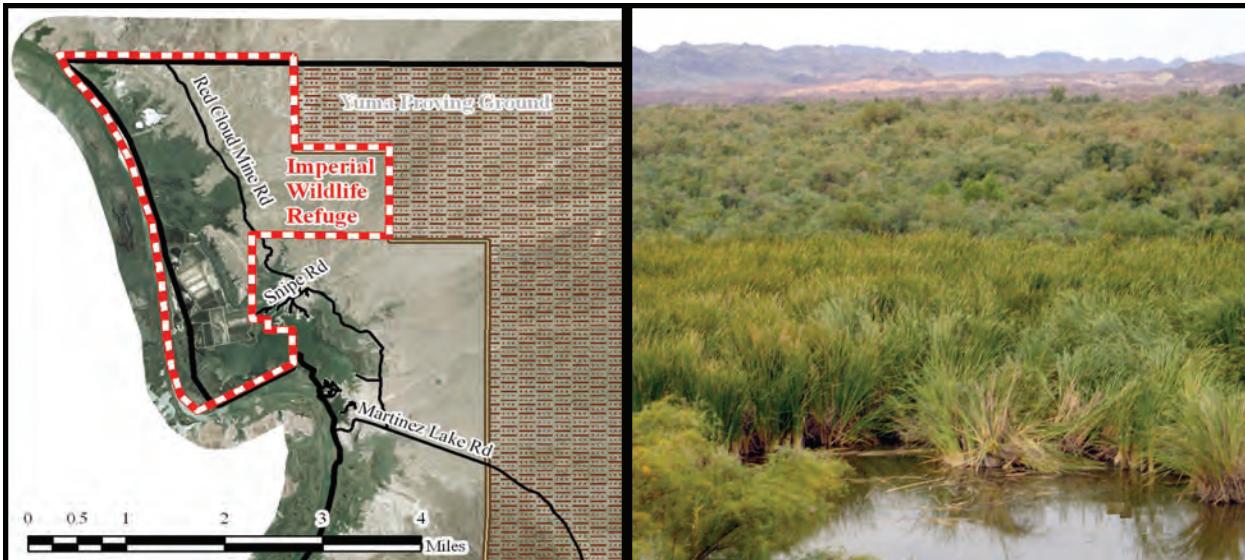
Cabeza Prieta Wildlife Refuge²

The Cabeza Prieta National Wildlife Refuge encompasses 860,010 acres across Yuma and Pima Counties. The refuge offers plentiful hiking, photography, wildlife observation and primitive camping. Before entering the refuge a valid Refuge Entry Permit must be obtained and a Military Hold Harmless Agreement signed. El Camino Del Diablo, a historic route linking the northern frontier of Mexico and of California, crosses the refuge.

²Photo courtesy of the Untied State Fish and Wildlife Service

Open Space Element

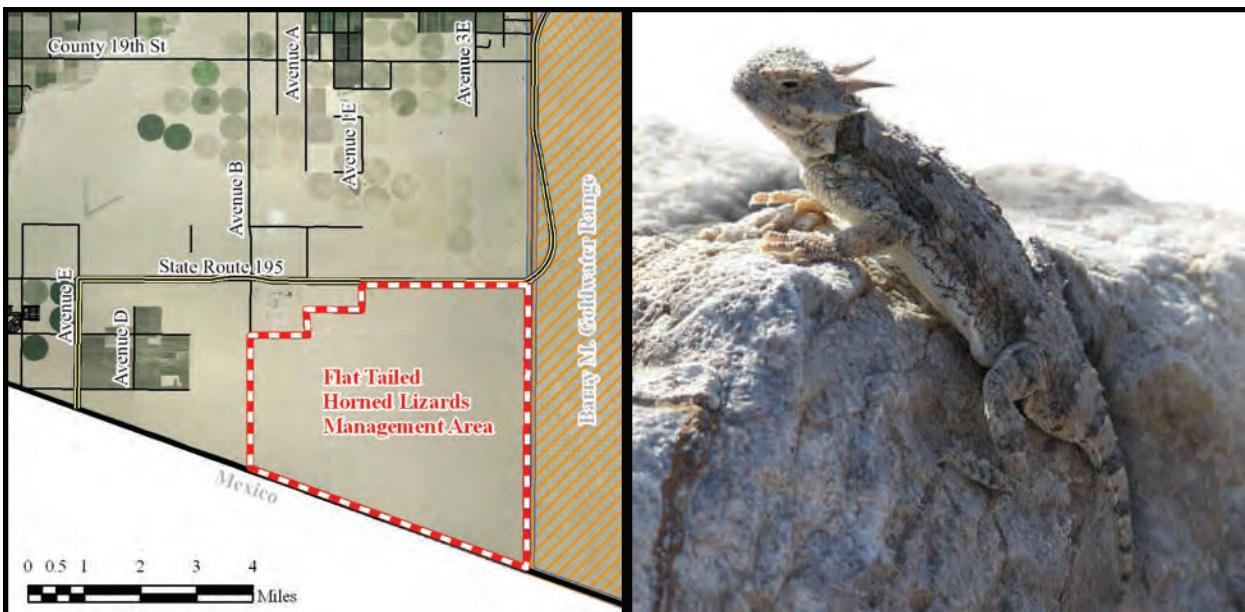
The Imperial National Wildlife Refuge protects wildlife habitat along the lower Colorado River in Arizona and California including the last unchannelized section before the river enters Mexico. Meers Point, located within the refuge has shaded tables, toilets and a boat launch. The refuge has a visitors center that is open from November through March.



Imperial National Wildlife Refuge Location

Imperial National Wildlife Refuge

The flat-tailed horned lizard was proposed for listing as a threatened species by the U. S. Fish and Wildlife Service in 1993. In response, the Flat-tailed Horned Lizard Rangewide Management Strategy was prepared. The Rangewide Management Strategy called for the establishment of the Yuma Desert Flat-tailed Horned Lizard Management Area. The Yuma Desert Flat-tailed Horned Lizard Management Area was established on federal land in southwestern Yuma County. The majority of the management area is located on the BMGR; however, 8,875 acres of Bureau of Reclamation land adjacent to the BMGR are included in the management area.



Flat-tailed Horned Lizard Management Area

³Photo courtesy of the Untied State Fish and Wildlife Service

A Flat-tailed Horned Lizard³

Open Space Element

The most significant aspect of the Yuma Desert Flat-tailed Horned Lizard Management Area is that federal policy requires that land in the management area will remain federally owned and undeveloped.⁴

Most of Mittry Lake Wildlife Area is within the floodplain of the Colorado River. In 1971, the U.S. Department of Interior gave the Arizona Game and Fish Department administrative authority over 3,575 acres of land and water at the lake for the management of fish and wildlife including migratory birds. Management emphasis is to optimize the wildlife habitat potential for present and future generations for public hunting and other wildlife-oriented recreation. The management emphasis is based on the 1971 lease and cooperative agreement which allows for the establishment of a public shooting area, waterfowl resting ground and provisions to improve conditions for the propagation of fish.



Mittry Lake State Wildlife Area

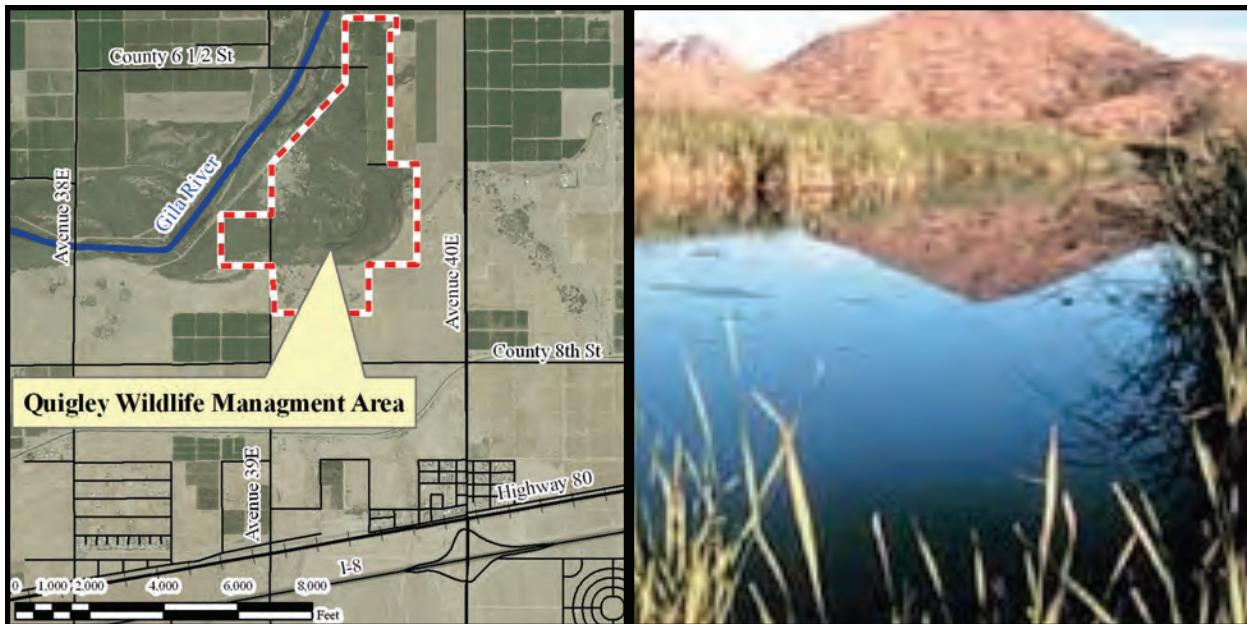


Mittry Lake State Wildlife Area

The Quigley Wildlife Area is a 612-acre property located within the Gila River floodplain managed by the Arizona Game and Fish Department. The goals for management of the Quigley Wildlife Area are to: restore and manage riparian habitats; maintain and enhance habitat suitability for waterfowl, shorebirds and other riparian associated wildlife; restore, enhance and manage habitats required by sensitive species; encourage compatible consumptive and non-consumptive uses and educational activities including development of "watchable wildlife" opportunities; and maintain and enhance fisheries and fishing opportunities.

⁴Flat-tailed Horned Lizard Interagency Coordinating Committee. “*Flat-tailed Horned Lizard Rangewide Management Strategy*” May 2003

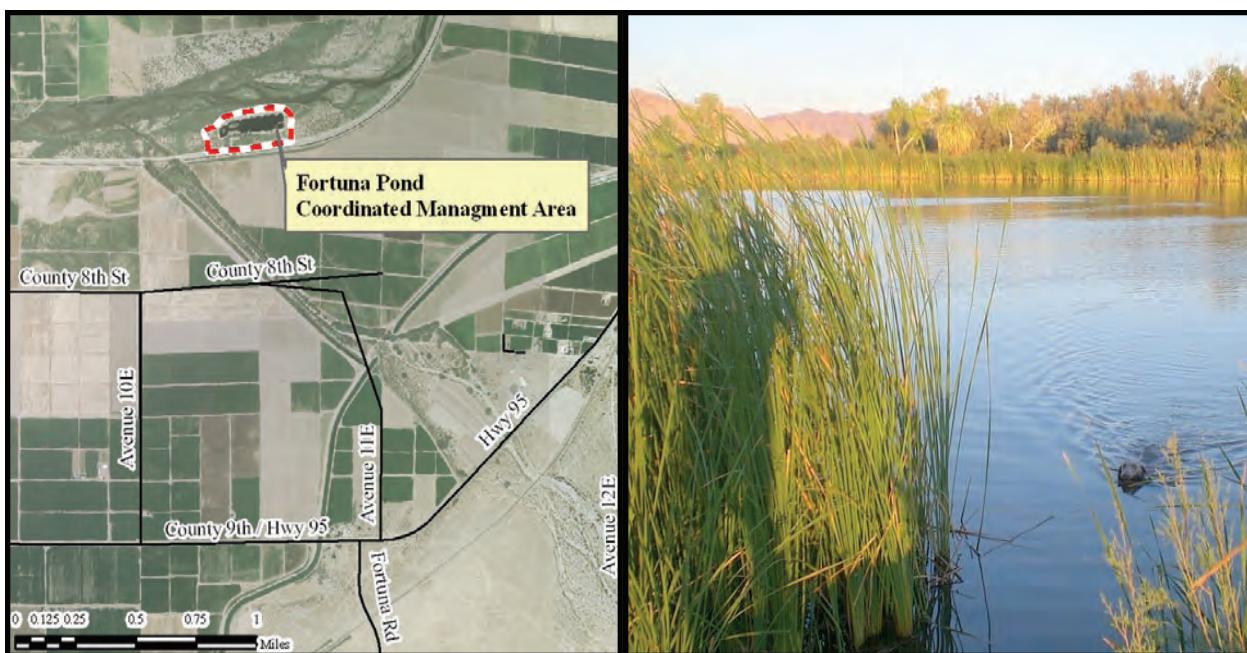
Open Space Element



Quigley Wildlife Management Area

Quigley Pond

The Fortuna Pond Coordinated Management Area serves as mitigation for fishing opportunities lost on the lower Colorado River. The 30-acre Fortuna Pond is cooperatively managed by the BLM, AGFD and the Bureau of Reclamation. The BLM monitors visitor use and associated resource damage at Fortuna Pond to determine the need for recreational facilities such as garbage cans, restrooms and/or a volunteer host site. The AGFD stocks Fortuna Pond with rainbow trout and channel catfish.

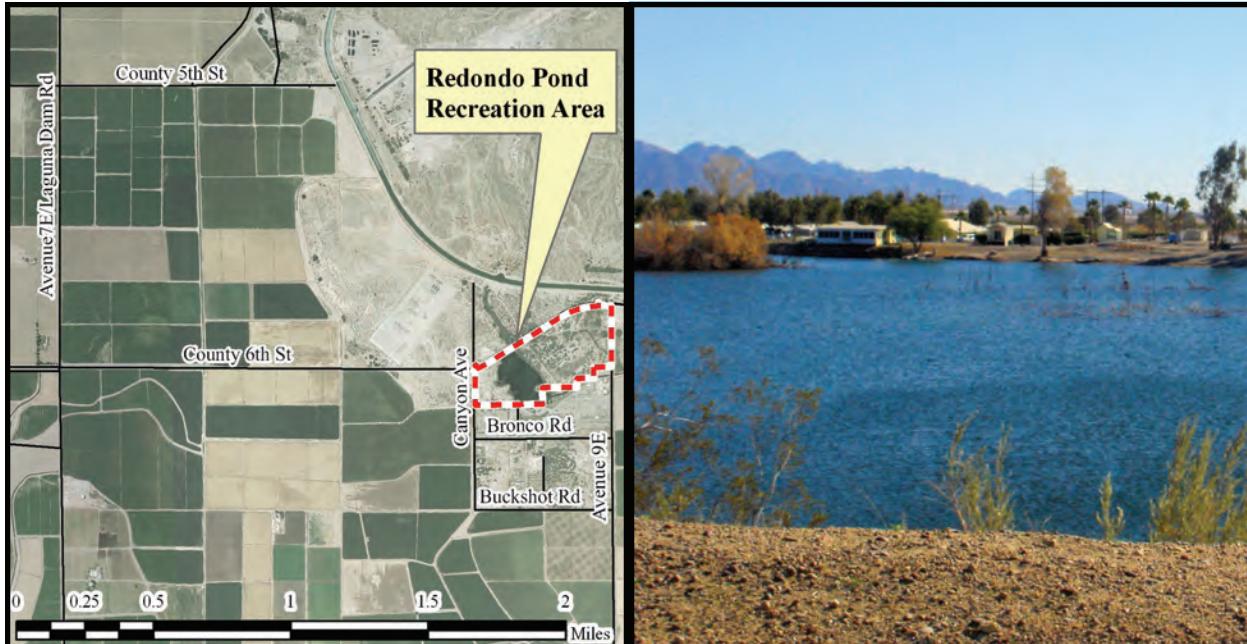


Fortuna Pond Coordinated Management Area

Fortuna Pond

Open Space Element

The Redondo Pond Recreation Area located on federal land is a joint project of Arizona Game and Fish Department's Region IV (Yuma) and the Bureau of Land Management's Yuma Sector. Redondo Pond was formed when groundwater filled an old gravel pit. AGFD and BLM recently completed improvements that included a parking area, providing disability access and construction of the fishing pier. In the summer Redondo Pond is stocked with channel catfish and in the winters it is stocked with rainbow trout.



Redondo Pond Recreation Area

Redondo Pond

Open Space Element

The Hunter's Hole Restoration project along the Colorado River is intended to revitalize the native habitat and reduce the number of illegal crossings and associated crime occurring across the international boundary with Mexico. An international and multi-agency cooperative venture focused on enhancing a 1,000 acre area under the auspices of the Yuma Crossing National Heritage Area (YCNHA) and the Mexican government has been established. The YCNHA is spearheading the effort, and through funding from a private foundation, is proceeding with consensus building, design and preliminary cost estimates.



Hunter's Hole Management Area

Hunter's Hole

Aerial photograph of Hunter's Hole Management Area looking north-northwest. Photo courtesy of the Bureau of Reclamation, cir. 2007.



Gila Mountains

The Gila Mountains have been identified by Yuma County residents as a key open space asset and recreational resource. County residents strongly desire the Gila Mountains to be preserved as open space and for the area to remain open to recreational use. The Arizona State Land Department and private owners own a small portion of the Gila Mountains, but the overwhelming majority of the Gila Mountains is owned by the federal government. The Gila Mountains south of County 14th Street are in the Barry M. Goldwater Range; north of County 14th Street the majority of the Gila Mountains are managed by the Bureau of Land Management. The BLM's plans and policies regarding the land it controls in the Gila Mountains are contained in the Bureau of Land Management's Yuma Field Office Approved Resources Management Plan. The BLM's recreational management goal for the Gila Mountains is to ensure that legal public access, wildlife habitat and cultural resources of the area are not compromised by encroaching urban development and increasing recreational demands. Other specific management policies relating to the Gila Mountains are summarized as follows and are mapped on page 14.

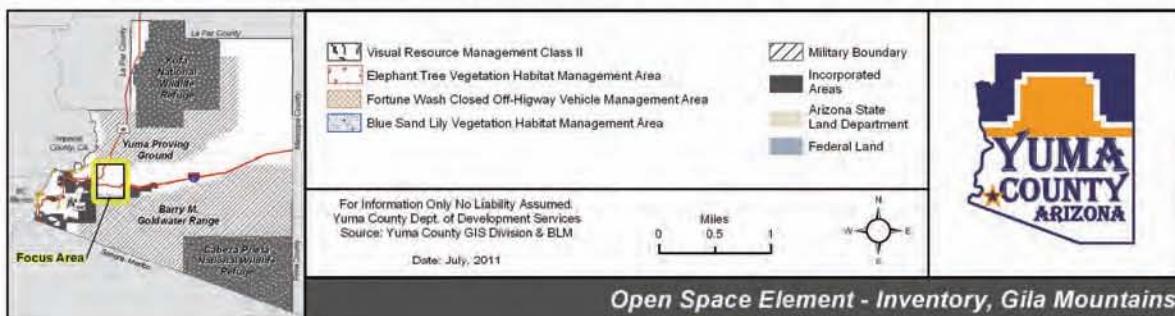
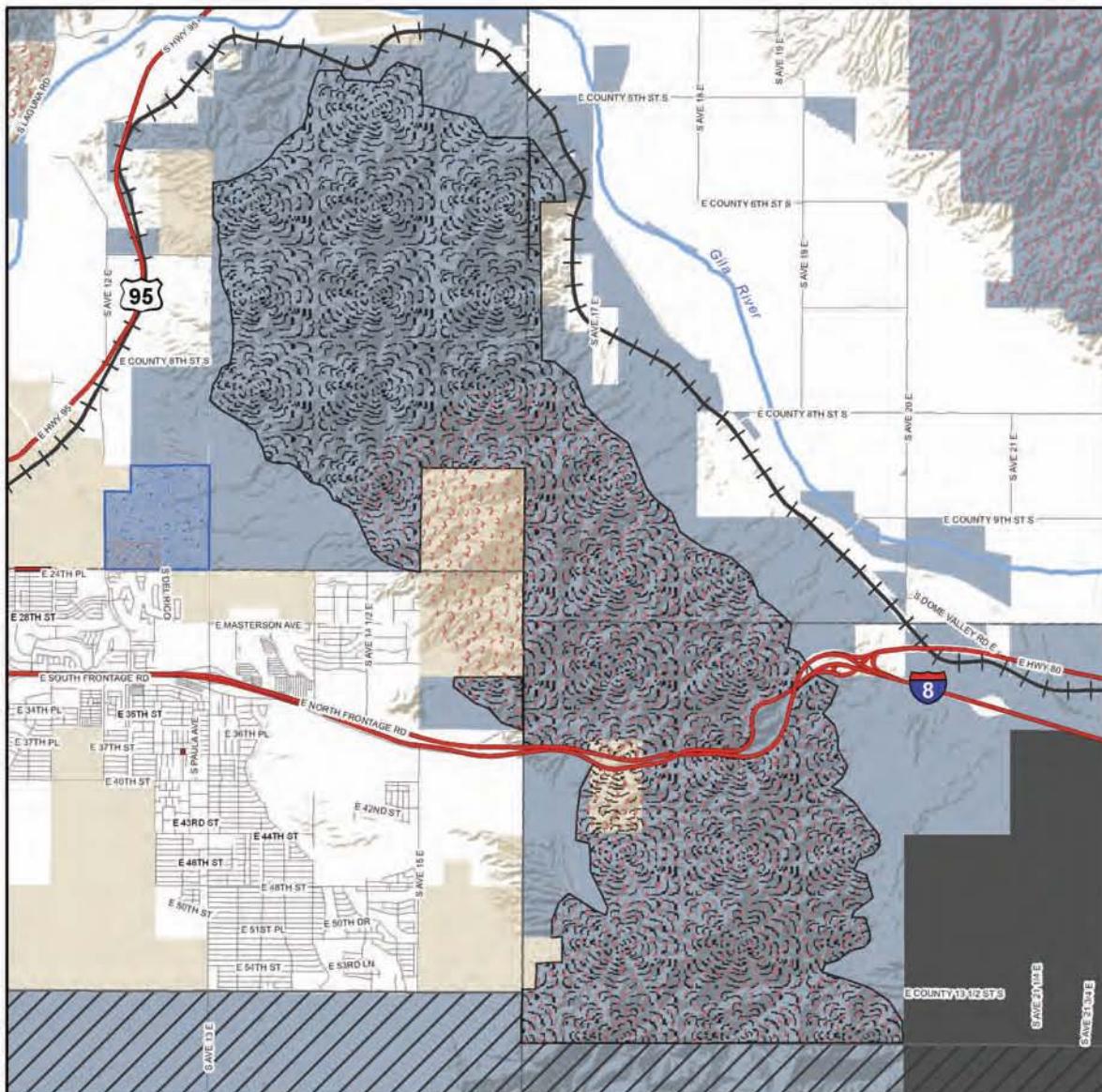
The BLM manages the visual impact of any potential development of land it controls by classifying it into one of four classes that detail what landscape-appropriate mitigation measures are necessary if and when development is permitted to occur. Nearly all of the Gila Mountains under BLM management are classified as visual resource management class II. Class II lands are managed to retain the existing character of the landscape. Any changes must repeat the basic elements of form, line, color and texture found in the predominant natural features of the characteristic landscape. Solar or wind generating facilities are not allowed on land classified as visual resource management class II.

The BLM has designated two areas in and around the Gila Mountains as vegetation habitat management areas (VHA). The 10,000 acre Elephant Tree VHA protects a proposed priority plant species, *bursera microphylla* (elephant tree), a shrub found in the Sonoran Desert on mountains. The population in the Gila Mountains is one of the most well represented stands in the U.S. The 500 acre Blue Sand Lily VHA protects *triteleiopsis palmeri*, a flowering plant listed as a sensitive species. This rare plant grows from bulblets and only flowers in wet years. The Blue Sand Lily VHA is located on stabilized sand dunes on the Gila River Mesa and is the northernmost known population in the United States. Within the Blue Sand Lily VHA, the BLM has closed 100 acres to off highway vehicle use. BLM policies for managing VHAs include the following policies: minimization of BLM-authorized ground-disturbing activities in VHAs to protect focal plant species-populations; land use authorizations for activities such as mineral extraction and livestock grazing would generally not be approved; avoiding to the extent possible, new transportation rights-of-way within VHAs; and appropriate mitigation when avoidance is not possible.



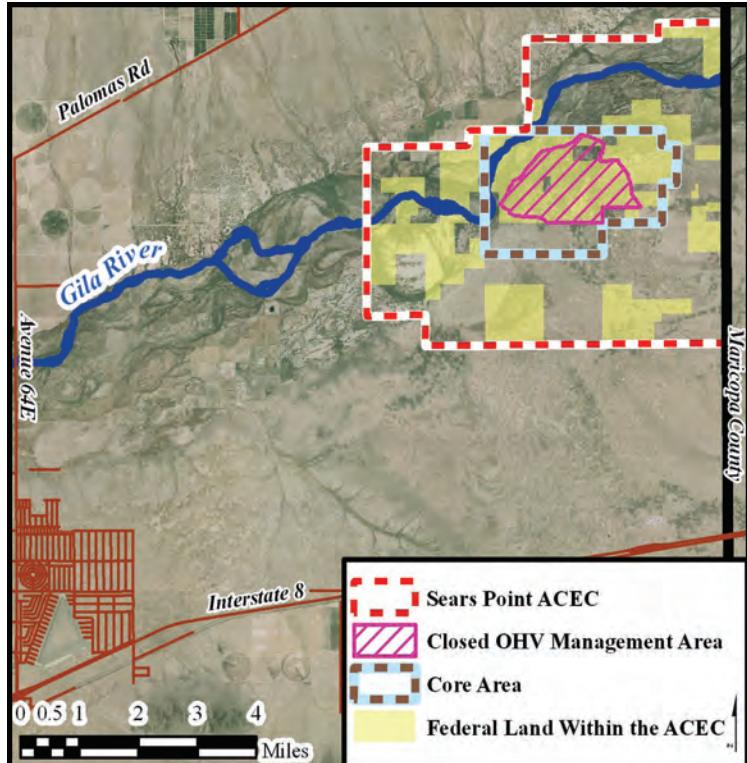
The Gila Mountains

Open Space Element



Map 3: Managed or Federally Owned Land in the Gila Mountains

Open Space Element



Sears Point Area of Critical Environmental Concern

Areas of Critical Environmental Concern (ACEC) are areas designated by the BLM for special management attention in order to protect the area and prevent irreparable damage to resources or natural systems. Areas qualifying for consideration as ACEC must have substantial significance and value including qualities of more than local significance and special worth, consequence, meaning, distinctiveness or cause for concern. The values for which ACEC are designated are considered the highest and best use for those lands and protection of those values would take precedence over multiple uses.

The Sears Point Area of Critical Environmental Concern, designated in the Bureau of Land Management's Yuma Field Office Approved Resources Management Plan, includes extensive petroglyph displays, prominent basalt mesas, historic trail corridors, and important riparian vegetation including a mesquite bosque. The Sears Point ACEC covers a total of 28,500 acres in Yuma and Maricopa Counties, with 3,700 acres in Yuma County designated as a core area. Within the core area, only day uses are permitted and 1,400 acres are closed to off-road vehicle use. Not all land in the Sears Point ACEC is federally owned. The BLM desires to acquire from willing sellers those non-federal lands within the Sears Point ACEC boundary. BLM policies and regulations for the Sears Point ACEC are only enforceable on federally owned land.

The BLM's long term plans for the Sears Point ACEC include the eventual construction of a visitor host site and interpretive exhibit panels at the central mesas and the main point of access, establishment of a parking area in an appropriate location and safe and legal access from Interstate 8. Additionally, the BLM plans to develop a Sears Point ACEC plan in coordination with interested partners that includes additional management prescriptions for balancing increased public visitation with protection of natural and cultural resources.



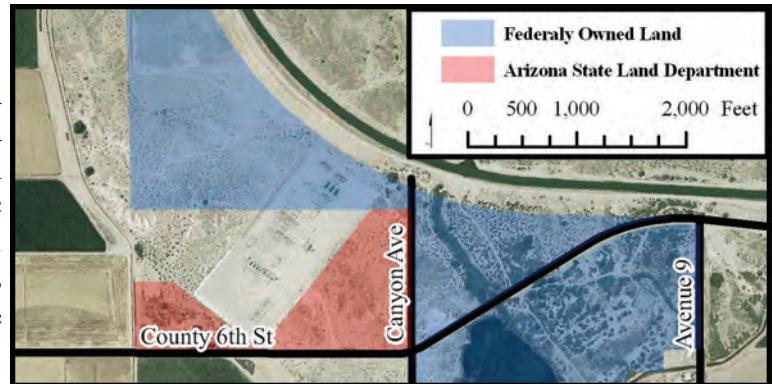
A Petroglyph at Sears Point

4.3 Areas of Concern

During the public outreach process that led to the development of the *Yuma County 2020 Comprehensive Plan*, Yuma County residents identified several areas of publicly owned open space where current patterns of usage were causing a degradation of the health, safety and welfare of nearby residents and land owners. In order to ensure that these specific sites are used by the general public in a manner that does not adversely impact nearby residents and land owners, Yuma County will work with the relevant federal and state agencies to devise a plan/strategy to address the specific areas of concern outlined in this section.

County 6th Street and Avenue 9E

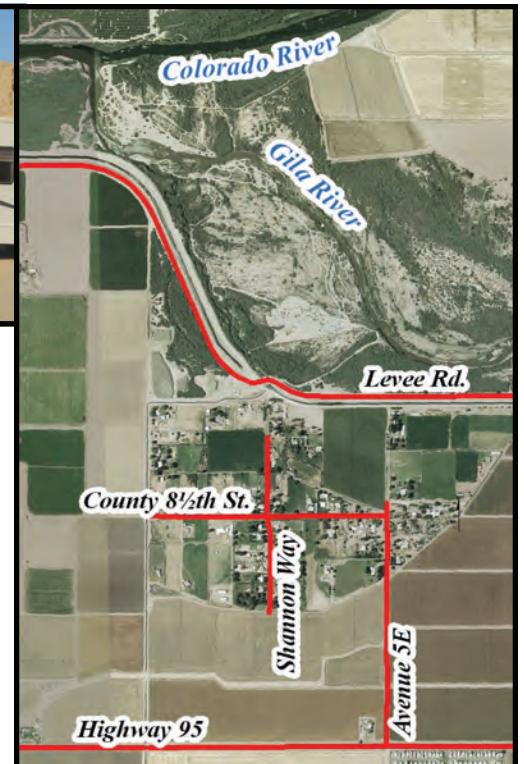
Public lands, both federal and state owned land, in the vicinity of County 6th Street and Avenue 9E have become a popular location for dry land camping. No facilities or specific plans exist to support camping in this area. Large and increasing numbers of campers have created issues with trash, sewage disposal and traffic.



Public lands in the vicinity of County 6th Street and Avenue 9E



Dry land camping along County 6th Street



Public lands in the vicinity of the Colorado and Gila River confluence

4.4 Open Space Policies and Priorities

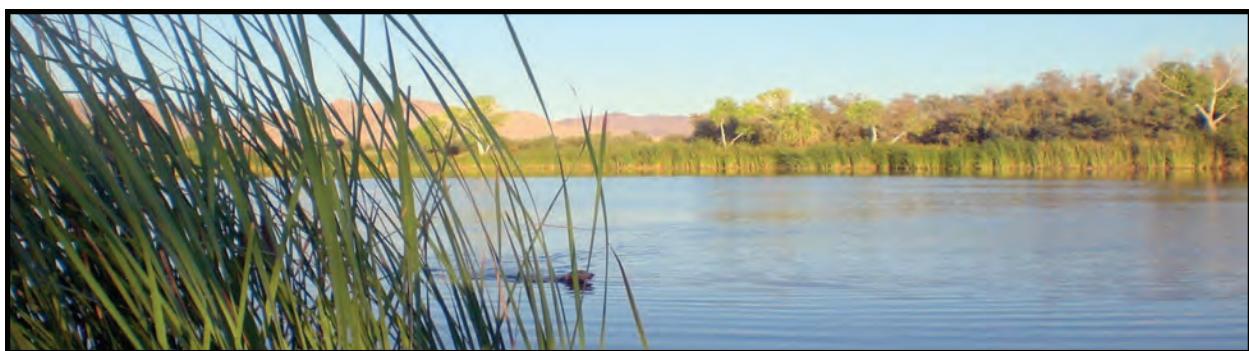
- OSPP.1:** Land use designation maps contained within the Land Use Element should more accurately reflect actual allowed uses. Land use designations for publicly owned open space shall be the land use designation category with allowed uses that most closely matches the adopted management plan for a particular parcel of publicly owned land.
- OSPP.2:** Yuma County will work to preserve mountainous areas such as the Gila, Mohawk, Laguna and Muggins Mountains and riparian areas along the Colorado and Gila Rivers as the open space areas most valued by Yuma County residents.
- OSPP.3:** Yuma County will work to maintain and when possible enhance access to publicly owned open space in mountainous and riparian areas.
- OSPP.4:** Yuma County supports the eradication of invasive species from and the restoration of riparian areas.
- OSPP.5:** Yuma County supports the further coordination between various management plans that exist for publicly owned open space in Yuma County and the Comprehensive Plan.
- OSPP.6:** Open space should be managed in a manner to ensure that its recreational use does not negatively impact nearby landowners and residents.
- OSPP.7:** The portion of the Mohawk Mountains located outside the Barry M. Goldwater Range should be kept open to recreational use by the general public.
- OSPP.8:** Yuma County supports the Hunter's Hole Restoration project along the Colorado River which is intended to restore native habitat along the river in the Hunter's Hole area and to help reduce the number of illegal crossings and associated crime occurring across the international boundary with Mexico by clearing out heavy undergrowth of invasive species that can provide cover for illegal activity to take place in.
- OSPP.9:** Yuma County supports the continued use by authorized users of authorized recreational trails and areas within the Barry M. Goldwater Range.



Mohawk Mountains

4.5 Open Space Actions

- OSA.1:** Yuma County will continually monitor all land management plans that cover state and federal land within Yuma County to ensure that the *Yuma County 2020 Comprehensive Plan* remains in synchronization with these plans.
- OSA.2:** Yuma County will work with the various governmental agencies that manage open space within Yuma County to ensure that any revision to an open space management plan brings it more into alignment with the desires of County residents.
- OSA.3:** Yuma County will work with relevant agencies and local residents to identify open space where illegal dumping is a problem and then find the most effective way to have those areas cleaned up.
- OSA.4:** Yuma County will work with the relevant federal and state agencies to devise a plan/strategy to address the specific areas of concern in regards to the management of publicly owned open space where current patterns of usage are causing a degradation of the health, safety and welfare of nearby residents and land owners as identified in the *Yuma County 2020 Comprehensive Plan*.
- OSA.5:** Yuma County will work with the relevant federal and state agencies to devise a detailed recreational plan for government land south of County 19th Street that will separate appropriate areas for off-road vehicle recreation, equestrian and hiking uses.
- OSA.6:** Yuma County will encourage and work with all relevant parties to establish a publicly accessible boat washing facility in order to prevent the spread of invasive species, most notably zebra mussels, into the Colorado River.
- OSA.7:** Yuma County will encourage and work with all relevant parties to create and install kiosks displaying information about recreational facilities, areas, opportunities and regulations at the entrances to public lands that have a high recreational use and have experienced problems with improper usage, littering, etc., in the past.
- OSA.8:** Yuma County will work to maintain, and when possible, enhance public hunting access to open space, recreational and sensitive area resource lands.
- OSA.9:** Yuma County will work, when possible, to conserve connections to all parks, trails, open spaces, or sensitive areas as defined in the *Yuma County 2020 Comprehensive Plan*



Fortuna Pond

Section Five—Recreational Resources Element

5.1 Introduction

Recreational resources are different from open space preservation and resources namely in scale, though that is not always the case. Additionally, whereas open space is typically the lack of development and is always found outside recreational resources, opportunities sometimes involve highly developed parcels of land and can also be found indoors. Recreation, whether in its passive or active form, is essential to the maintenance of the human body in a physical, emotional, educational and spiritual sense. Therefore, it is essential that Yuma County commit to a high priority in the maintenance of existing recreational facilities and for the development of new ones as time passes and as Yuma County continues to grow in population. History shows the County has done just that, but future plans need to be laid via this planning document to help ensure high quality recreational opportunities and facilities for all the citizens of Yuma County.

Examples of recreational resources are parks, open space areas and trails, as well as golf courses, swimming pools, aquatic centers and more specialized examples such as archery and gun ranges. Of course, the types of activities that can be conducted at these locations is lengthy, ranging from the simple and traditional picnic areas to more modern and sophisticated facilities such as equestrian centers, race tracks and boating and fishing areas. For the most part, open space facilities in Yuma County are addressed in the Open Space Element of this Plan, but some of the above listed recreational activities can and do take place in traditional parks, too.

This element of the *Yuma County 2020 Comprehensive Plan* will be organized in the following manner: 1) Introduction, 2) Delineation of Parks, 3) Trails, 4) Yuma County Parks and Open Space and Trail Master Plan, 5) Analysis of Recreational Needs, 6) Citizen Advisory Group Recommendations, 7) Proximity of Parks to People, 8) Recreational Resources Policies and Priorities and 9) Recreational Resources Actions. They are presented on the following pages.



Mohawk Mountains

5.2 Delineation of Parks

The *Yuma County Parks and Open Space and Trail Master Plan* which was adopted by the Yuma County Board of Supervisors in March 2006, breaks parks into five (5) categories:

1. Pocket Parks
2. Neighborhood Parks
3. Community Parks
4. Regional and Conservation Parks
5. Special Use Parks

Pocket Parks

Pocket parks range in size from 2,500 square feet to two acres. This type of park is not recommended unless park space is significantly lacking in an existing developed area. This is because these small spaces have a tendency to create additional administrative and maintenance difficulties for the County unless maintained by a private entity. On the other hand these small specialized facilities can effectively serve a concentrated or limited user group. Desirable site location characteristics include neighborhoods in close proximity to apartment complexes, townhouse development or housing for the elderly where a population ranging from 500 to 2,500 persons can be adequately served. A pocket park in Yuma County is the Foothills Optimist Park located in the Foothills on the west of Camino del Sol near the Mesa Del Sol Golf Course consisting of one (1) acre.



Foothills Optimist Park Location

Foothills Optimist Park

Foothills Optimist Park is a small local park located in a retention basin that is about one acre in size. It contains a small turf area and a ramada with picnic tables. This park is made possible through efforts of the Optimist Club. It is the only developed park and recreation facility located in the Foothills area.

Neighborhood Parks

Neighborhood parks range in size from two (2) to ten (10) acres and are programmed for areas of intense recreational activities such as field games, court games, crafts, playground apparatus, skating and picnicking. Desirable characteristics include relatively flat, well-drained sites suited for intense development. Neighborhood parks should be easily accessible to surrounding neighborhoods and within safe and accessible walking and biking distance. These neighborhood parks should serve a population ranging from 2,000 to 10,000 citizens.

Currently there are two existing neighborhood parks used mainly as recreational parks in unincorporated Yuma County: 1) the Gadsden Park located in Gadsden between Arizona Street and South Highway U.S. 95 consisting of eight (8) acres, and 2) the Kiwanis Park located in Tacna north of Kansas Avenue and east of Avenue 40E consisting of approximately ten (10) acres.

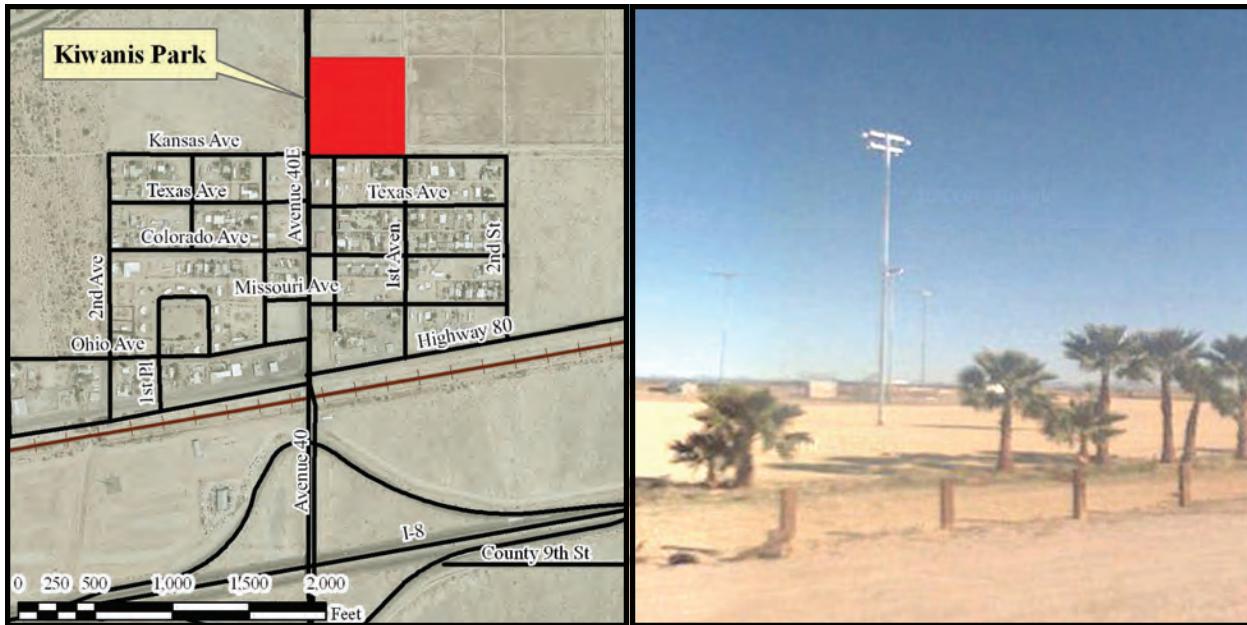


Gadsden Park Location

Gadsden Park

The Gadsden Park is maintained and operated by the Gadsden Community Development Board and the Gadsden School District through an intergovernmental agreement with Yuma County. Gadsden Park contains ball fields, picnic ramadas and playground equipment. In 2009 a grant from the Arizona Department of Housing paid for the construction of a full-sized basketball court at Gadsden Park.

Neighborhood Parks (continued)



Kiwanis Park Location

Kiwanis Park

Kiwanis Park is approximately a ten-acre park located on the north side of Tacna. The park contains ball fields, picnic ramadas and a playground. The park is located on land owned by Yuma County and maintained by the Wellton-Mohawk Valley Kiwanis Club.

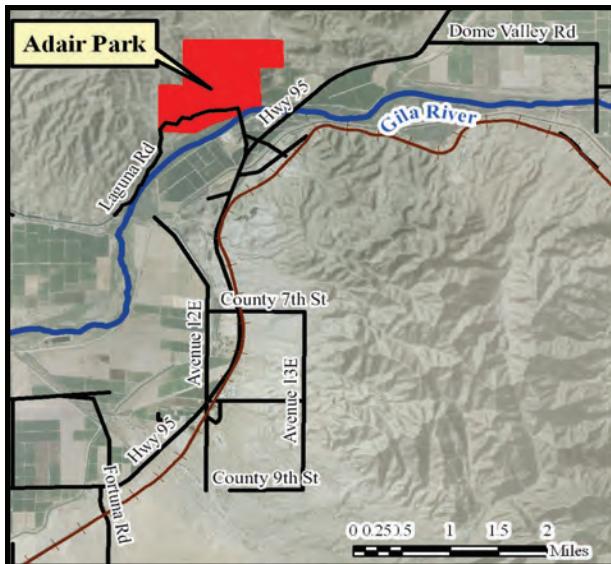
Community Parks

Community parks range in size from ten (10) to twenty-five (25) acres. These larger sites should, if possible, consist of areas exhibiting diverse environmental quality and may include areas suited for intense recreational facilities. Community parks may be areas noted for their natural qualities for outdoor recreation or may be a combination of both active and passive pursuits. Community parks may also include natural features such as water bodies.

There is one potential community category park in Yuma County, the Riebe Retention Basin, located northwest of the City of Yuma north of County 8th Street and at the end of Riebe Avenue consisting of ten (10) acres. It functions as a retention basin, but has a potential recreational component to it when dry.

Regional and Conservation Parks

Regional and conservation parks are more than likely to be managed by or in conjunction with another lead agency or organization and range from twenty-five (25) to 1,000 acres. These parks are generally large parks that provide a wide variety of recreational opportunities and facilities to serve 50,000 or more people. They may also be reserved for conservation and natural resource management. These parks are primarily natural, developed for recreational activities or a combination of both depending upon the needs of the population.



Adair Park Location



Adair Park

The only park in Yuma County of this type, Adair Park, consisting of 660 acres, has nine rifle, pistol and archery ranges. There is also a baseball diamond, radio-control model airplane strip, picnic areas and camping sites available. Though owned by Yuma County, Adair Park is operated by a concessionaire.

Special Use Parks

Special use parks may include single purpose recreational activities, such as golf courses, gun ranges, skate parks and historic areas that preserve and maintain buildings, or sites and objects of archeological significance. The service area, desirable size and population served will depend on the type of special uses, user characteristics and facility standard requirements. These parks may be classified as another type of park, also.

5.3 Trails

Open lands, historic trails, cultural sites, canals, rail lines, drainage ways and municipal trails when linked together can create a setting that is perfect for a county-wide trail system. The County is in a unique position to establish a trail system that will be a point of pride for future generations.

Such an opportunity exists with the potential linking of natural and cultural resources located within Yuma County: 1) the Juan Bautista de Anza Trail, 2) the Butterfield Trail, and 3) the El Camino del Diablo Trail.

Important items to remember in the formation and usability of any trail are the following: 1) providing trailhead access to partnered resource areas, 2) connecting to existing and future trail systems as may be provided with the Cities of Yuma, Somerton, San Luis and the Town of Wellton, and 3) updating the Zoning Ordinance and development standards to provide for trails within developments which connect to an overall trail system. These were identified in the 2006 *Yuma County Parks and Open Space and Trail Master Plan*.

Juan Bautista de Anza National Historic Trail

In 1990, Congress established the Juan Bautista de Anza National Historic Trail, a 1,210-mile historic route from Nogales, Arizona, to San Francisco, California, running east-west through Yuma County. The trail commemorates the story of the 1775-1776 Spanish Expedition whose members, consisting of some 30 families, founded and established San Francisco. They also established a mission in the Yuma area, the first attempted European settlement in the area.

Congress established the Juan Bautista de Anza National Historic Trail not only to commemorate the significance of Anza's colonizing expedition to San Francisco Bay, but also to provide outdoor recreational opportunities. The ultimate goal is to create a recreational trail to provide a multiuse, non-motorized, off-road, continuous trail from Nogales to San Francisco. The National Park Service is tasked with forming partnerships with nonprofit support groups to develop a unified, continuous trail and to promote public awareness of its history and to contribute to economic vitality along the route by linking historic sites along a marketed tourist route. Federal components and high potential segments will be key elements of this route. These segments will be linked with trails which parallel the historic route to provide the potential for a continuous recreational and commemorative trail. If linking routes meet the criteria, they can be certified as recreational components of the Juan Bautista de Anza National Historic Trail.¹

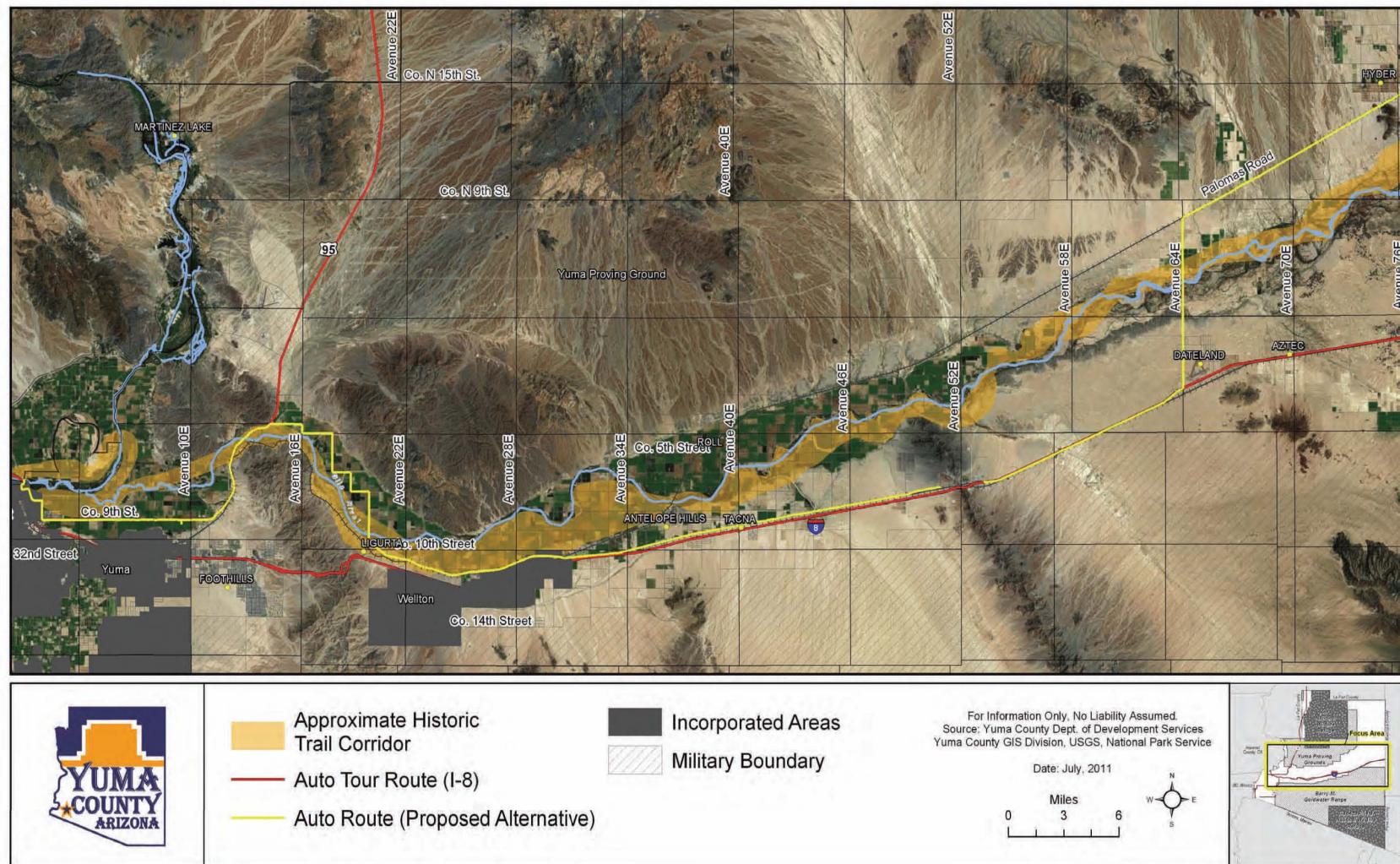
¹*Juan Bautista de Anza National Historic Trail Comprehensive Management and Use Plan*. National Park Service. 1996.

Yuma County 2020 Comprehensive Plan

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Recreational Resources Element

Recreational Resources Element - Juan Bautista de Anza National Historic Trail



Map 1: Juan Bautista de Anza National Historic Trail

Recreational Resources Element

A five mile segment of trail along the Yuma Canal in the City of Yuma is pending certification as part of the Juan Bautista de Anza National Historic Trail. The National Park Service (NPS) is working with the City of Yuma and the Yuma Crossing Natural Heritage Area on a plan for more trails along the Colorado River. In January 2010, 2.5 miles of trails in the Yuma East Wetlands just east of the Ocean-to-Ocean Bridge were eligible for certification as components of the Juan Bautista de Anza National Historic Trail.

In addition to the multiuse, non-motorized and off-road trail component of the trail, National Historic trails can contain an auto route. An auto route is a route that is designated and marked along existing roads and as closely as possible parallels the historic trail corridor. With the co-operation and assistance of road-managing agencies, auto route signs are intended to be placed along federal, state and county roads at appropriate road junctions (consistent with the sign regulations of the managing highway department). Signs will indicate "Historic Route" or "Auto Route" as appropriate. As a general rule, the NPS will help fund the initial auto route signs, but states will be encouraged to manufacture, install, maintain and replace the auto route markers according to the specifications of their respective highway departments.²

The Butterfield Trail is the trail that was used from 1857 to 1861 by stagecoaches to transport mail from St. Louis to San Francisco. Fort Yuma was used as a terminal between Tucson to the east and Los Angeles to the west and as expected, the trail makes it way in an east-west orientation across Yuma County.

The El Camino Del Diablo Trail, literally, the highway of the devil, was used for centuries as a route tracing a south to north orientation across Yuma County as a part of a longer trail from present day Caborca, Sonora, Mexico to Yuma, Arizona. It was named as such because of the high risk of attack and because of the extreme physical demands travelers would typically encounter along its route. It was used though because it was a much shorter route than going the way of Tuscon and Gila Bend, Arizona, before traveling on to Yuma. According to historical accounts, the trail is appropriately named.



Members of the Quechan tribe help to protect the Anza expedition's men, women and children during their Colorado River crossing on November 30, 1775, on Anza's way eventually to San Francisco. Graphic by Wade Cox.

²Juan Bautista de Anza National Historic Trail Comprehensive Management and Use Plan. National Park Service. 1996.

Recreational Resources Element

Three photos depicting scenes found along El Camino Del Diablo Trail as it runs though Yuma County.

Photos used courtesy of Monty Stansbury.



Recreational Resources Element

5.4 Yuma County Parks and Open Space and Trail Master Plan

On March 20, 2006, the Yuma County Board of Supervisors adopted the *Yuma County Parks and Open Space and Trail Master Plan*. The creation and adoption of a parks master plan was the first act of the parks department which was reestablished in 2004. The intent of the *Yuma County Parks and Open Space and Trail Master Plan* is to define the park, recreation, and trail and open space needs of the residents of unincorporated Yuma County. In November 2005 the Yuma County Parks Department commissioned a survey of Yuma County citizens to determine support, use and need for parks, open space and trails. Responses to this survey were used to create the *Yuma County Parks and Open Space and Trail Master Plan*. Action points listed from that survey regarding parks are presented below.

Parks

- Establish a funding system
 - Capital funds for land acquisitions and construction
 - Operating funds for staffing, operations and maintenance
- Refurbish existing parks to current codes, safety requirements and community need.
- Acquire land and construct two multi-use community parks in the:
 - Foothills Planning Area
 - Gadsden Vicinity
- Acquire additional lands around Adair Park in the Laguna Mountains to create a regional park. The McPhaul Bridge should be included in this park.
- Require neighborhood parks and trails in all new developments that are developer constructed and maintained by a homeowners association.
- Fill neighborhood park needs with parcel acquisition and new park construction

5.5 Analysis of Recreational Needs

The next two pages contain tables that delineate the approximate number of acres in Yuma County that are in parks, wildlife refuges, wilderness areas, management areas and other assorted recreational areas. As can be seen, Yuma County contains many varied recreational resources.

The National Recreation and Park Association (NRPA) standards suggest that from 6.25 to 10.50 acres of park land should be provided for every 1,000 residents. Using the current 2010 U.S. Census population base of 195,751 permanent residents and a seasonal population of 284,000 persons, the county would require approximately 1,225 to 2,980 acres of park land.

Since 1980, the average growth of the entire county population per decade through 2010 is 30.8%. Extrapolations are always difficult because of the number of variables that may come into play over a ten year period of time. In this case, the largest variables likely at play with making a population projection for the year 2020 is the downturn in the overall health of the U.S. and Arizona economies versus the fact that the first baby-boomers officially have started to retire as of January 1, 2011, and Yuma County has a lot of retirees. It is impossible to know for sure which will dominate as the decade of 2010 to 2020 plays out, but population growth can be expected to continue. If a 31% countywide population growth is anticipated between 2010 to 2020, then using the previously stated NRPA standards of 6.25 to 10.50 acres of park land that should be provided for every 1,000 residents, Yuma County would need between 1,600 (6.25 acres per 1,000 population) and 2,688 (10.5 acres per 1,000 population) acres of park land. A 2010 population of 195,751 times .31 (31%) equals an additional 60,683 residents, thus a projected population of 256,434 residents in Yuma County by 2020.

As can be seen from Table 1, the amount of parks only lands is below the standard as suggested by the NRPA for even the year 2010. However, Yuma County is unique in that it also contains many recreational features and areas not available in other places of the United States, such as national wildlife refuges and wildlife areas. These ease the deficient amount in the parks category. Granted, these lands are not parks per se, but nonetheless offer recreational opportunities to Yuma County residents.

As can be seen from Table 2, the County contains over one-million acres of recreational and wildlife viewing opportunities. Even by taking the higher suggested standard of the NRPA of 10.5 acres per 1,000 residents for the 2020 projection year, when considering all of these acreages Yuma County exceeds the suggested amount by over 400 times.

All these calculations do not even take into consideration the park and recreational opportunities provided by the Cities of San Luis, Somerton, Yuma and the Town of Wellton ranging from standard parks to specialized recreational facilities such as aquatic centers, skateboard parks, and golf courses, both private and public. Public recreational opportunities are not mutually exclusive, meaning that Yuma County residents can freely access city parks and residents of cities and towns located in Yuma County can use parks and recreational facilities located in the unincorporated area of Yuma County.

Recreational Resources Element

Table 1: Yuma County Parks and Park Acreage

<u>Park/Retention Basin/Name:</u>	<u>Location:</u>	<u>Size (in acres):</u>	<u>Category/Type:</u>
Foothills Optimist Community Park	El Camino del Sol in Mesa del Sol	1	Pocket
18th Street Retention Basin	18th Street	5	Neighborhood
Gadsden Park	Gadsden	8	Neighborhood
Kiwanis Tacna Park	North side of Tacna	9.4	Neighborhood
Adair Range	Confluence of U.S. Highway 95 & Gila River	660	Regional or Conservation (Also, could be considered a Special Use-type of park.)
Total Acreage		683.4	

Yuma County operated a Parks Department until it was disbanded in 1982. It was re-established by action of the Yuma County Board of Supervisors in 1997. It is still a portion of the Public Works Department, but budget cuts over time have reduced its size. Today, it mainly manages the following parks in Yuma County: 1) Gadsden Park, 2) Foothills Optimist Park, 3) Kiwanis Tacna Park, 4) Adair Range, and 5) the BMX Track located on the east side of Pacific Avenue and slightly north of 32nd Street in the City of Yuma.

The final analysis is that more traditional parks and recreational opportunities are needed and will be needed in the future, but the open space and recreational diversity of Yuma County compliments and offsets this deficiency for the time being.

Recreational Resources Element

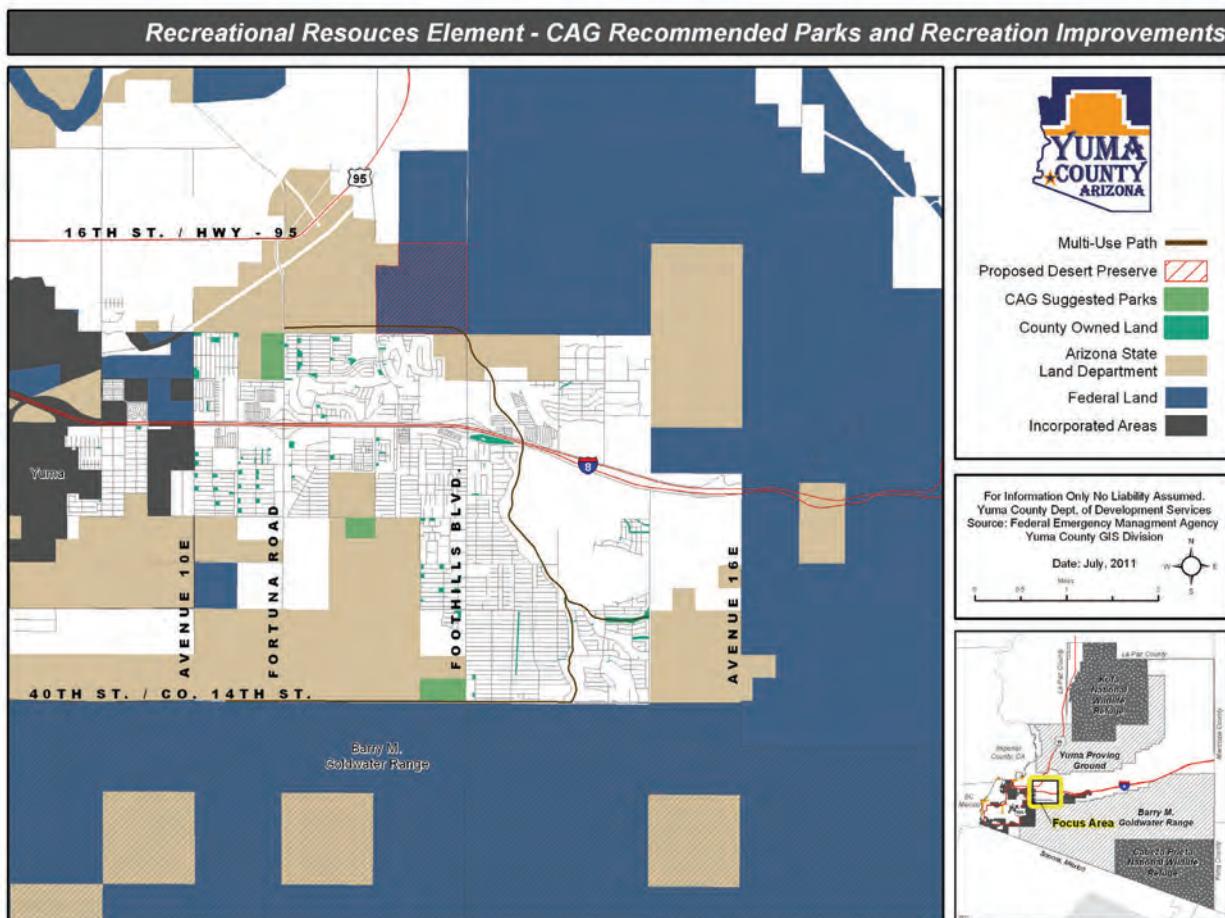
Table 2: Open Space, Wilderness, Wildlife Refuge and Recreational Management Areas in Yuma County

<u>Name of Entity:</u>	<u>Size (in acres):</u>	<u>Jurisdiction:</u>
Kofa National Wildlife Refuge and Wilderness Area	562,159	U.S. Fish & Wildlife Service (USFWS)
Cabeza Prieta National Wildlife Refuge	455,256	USFWS
Yuma Desert Management Area	31,700	Bureau of Land Management (BLM)
Eagletail Mountains Wilderness Area	24,580	BLM
Muggins Mountains Wilderness Area	7674	BLM
Imperial National Wildlife Refuge	4089	USFWS
Sears Point ACEC (core)	3700	BLM
Mittry Lake Wildlife Area	3575	Arizona Game & Fish Department (AGFD) and BLM
Yuma East Wetlands Restoration	1392	Bureau of Reclamation and Corps of Engineers
Quigley Wildlife Management Area (Quigley Ponds)	612	AGFD
Hunters Hole Management Area	435	BLM and Yuma Crossing National Heritage Area
Redondo Pond Recreation Area	68	BLM and AGFD
Fortuna Pond Management Area	30	BLM, AGFD, & Bureau of Reclamation
Total Acreage:	1,095,270	

Recreational Resources Element

5.6 Citizen Advisory Group Recommendations

Between 2007 and 2010, Citizen Advisory Groups (CAG) composed of area residents for each planning area within Yuma County reviewed the Comprehensive Plan and made recommendations on updating it to reflect the concerns of area residents regarding open space and recreational resource issues. This process began with a town hall style meeting. Each CAG then identified a list of issues regarding open space and recreational resources they considered critical to their planning area. The county shall work towards addressing the issues whenever possible. The issues are presented under the Recreational Resources Policies and Priorities and Recreational Resources Actions portion of this Element.



Map 2: Foothills Planning Area Citizen Advisory Group Recommended Parks and Recreation Improvements

5.7 Proximity of Parks to People

An important land use planning issue is the proximity of parks to people. For people to be able to realistically use and enjoy parks and other recreational facilities, they must be relatively near to one another.

Figure 1 shows, in pie-chart form, the percentage of people within certain distances to parks and the percentage of people within three (3) miles of a park, respectively. Maps 3 and 4 show in graphical form the distance of the populous to community, neighborhood or regional parks and pocket parks.

In the future more needs to be done to ensure that parks are available to the public at reasonable distances, for example, at no more than three miles. Maps 5 and 6 depict County owned parcels that mainly function as storm water retention basins, but at times double as small de-facto recreational spaces.

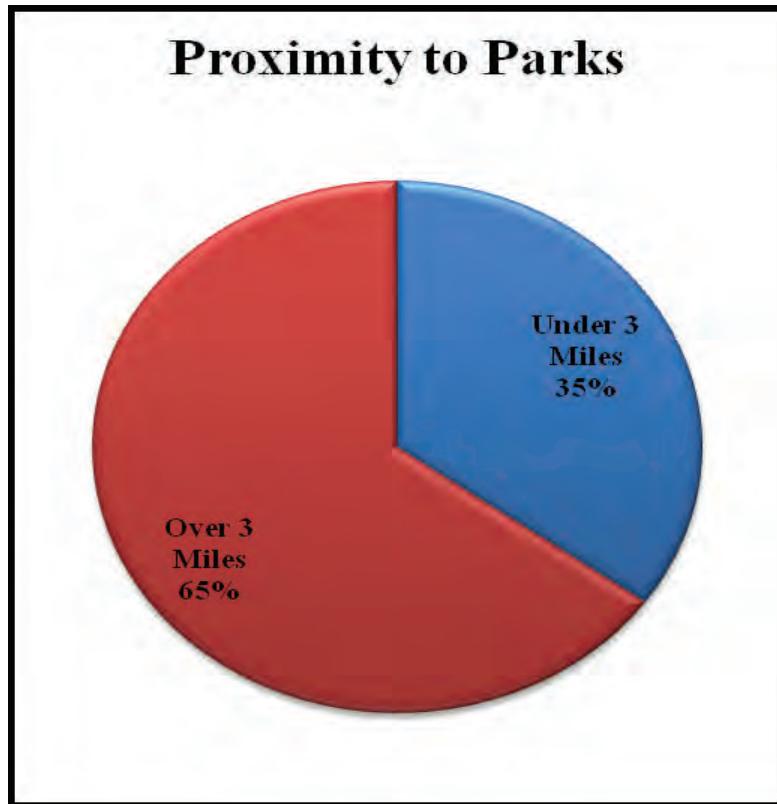
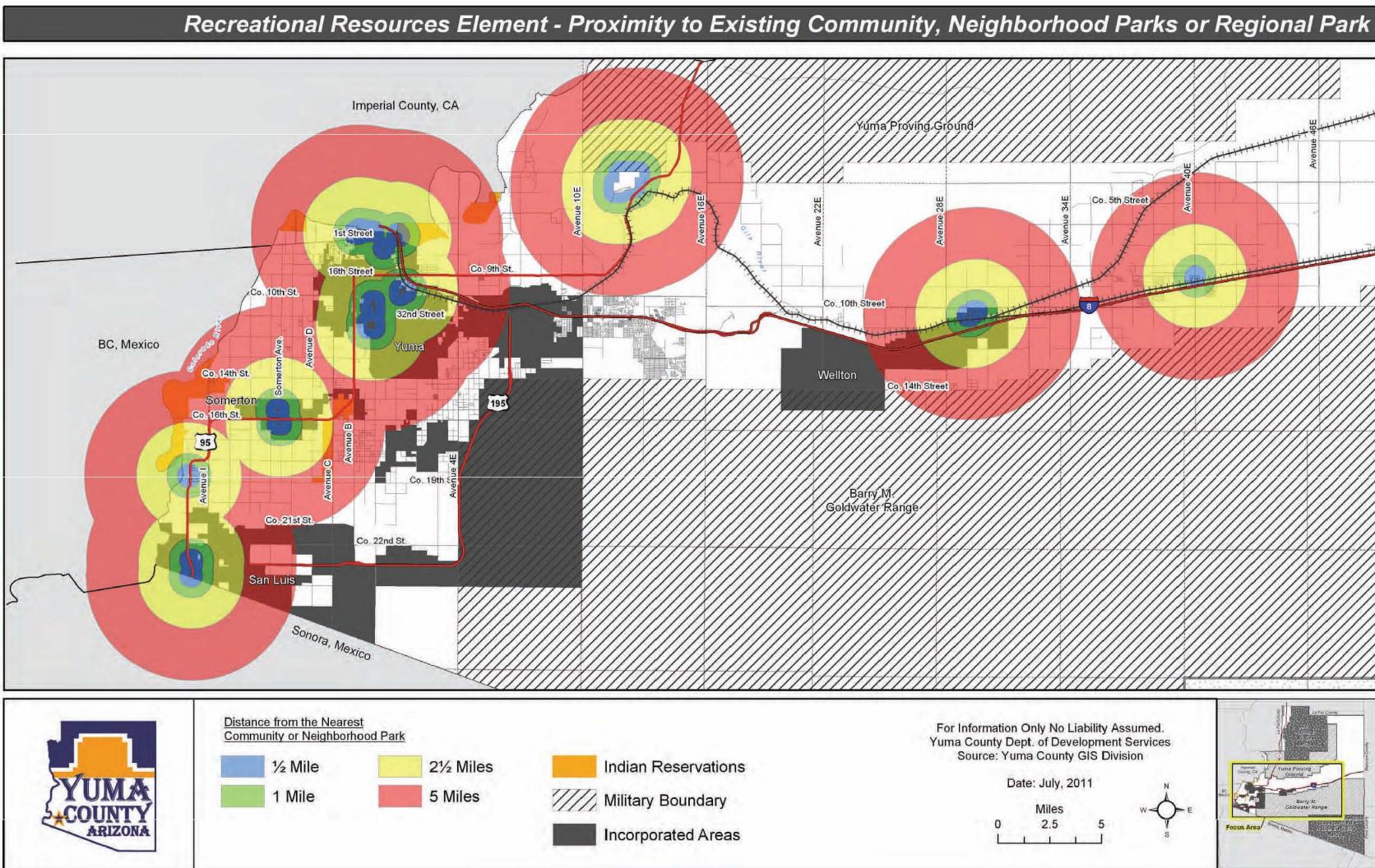


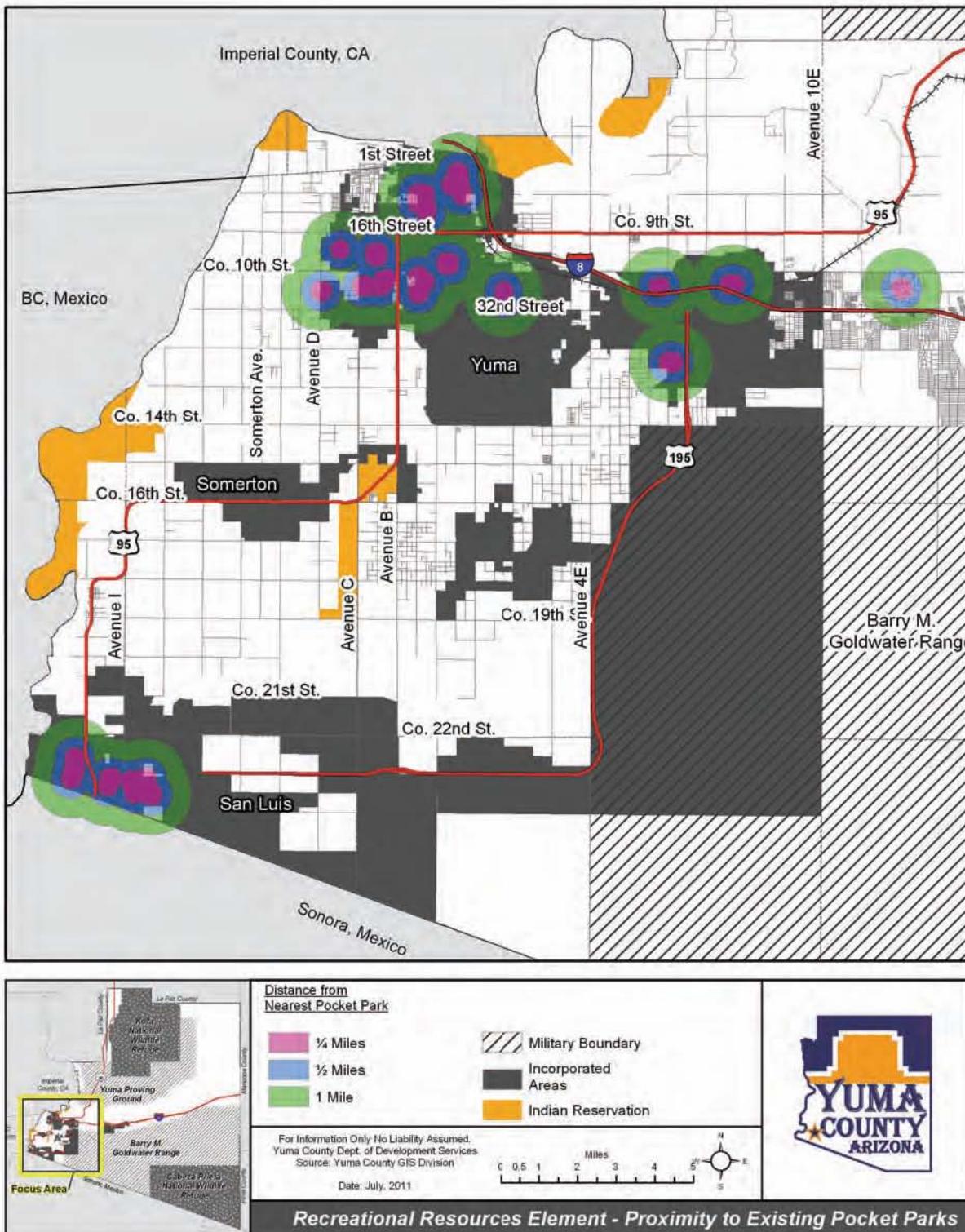
Figure 1: Proximity to Parks

Recreational Resources Element



Map 3: Proximity to Existing Community, Neighborhood Parks and Regional Park

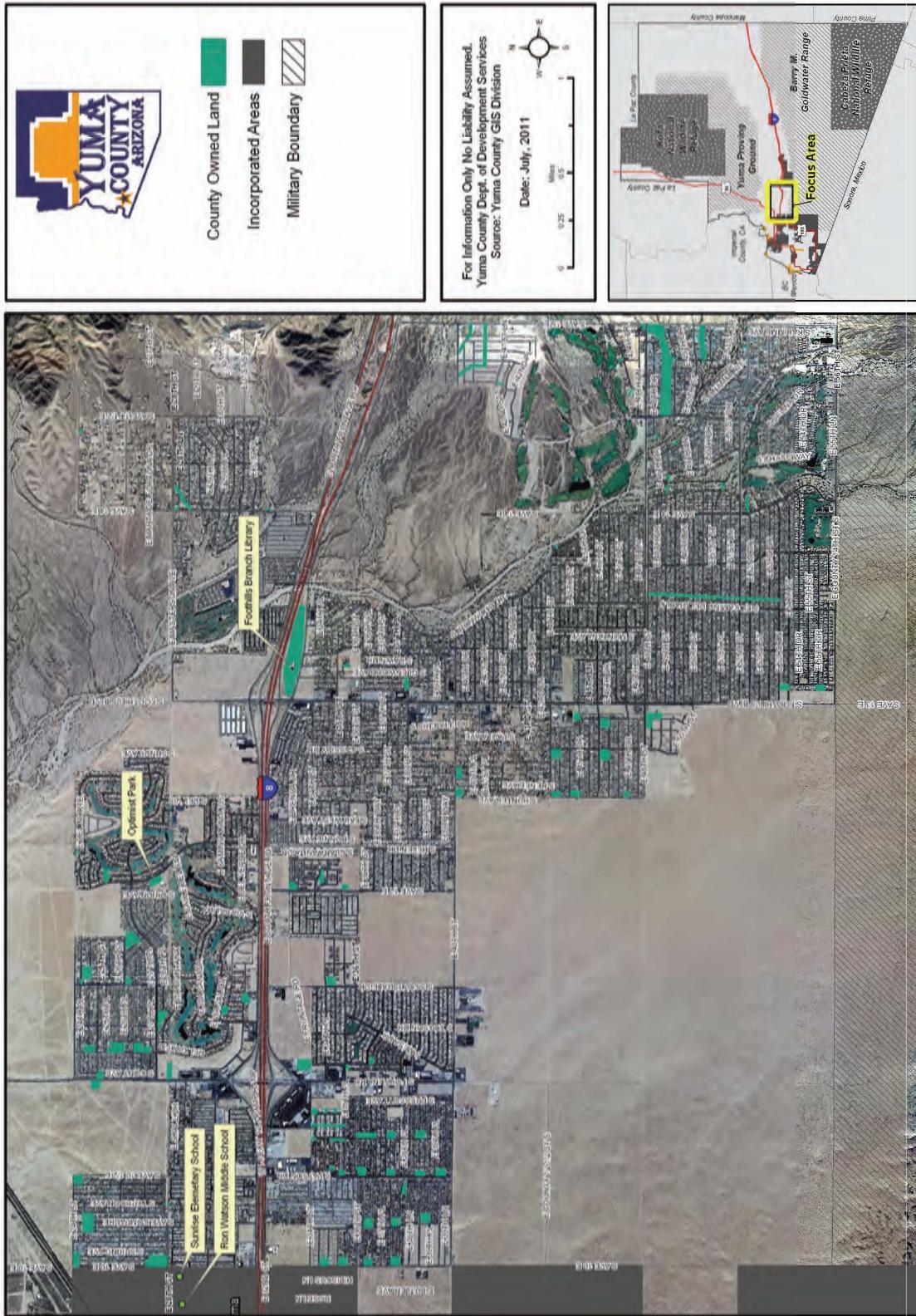
Recreational Resources Element



Map 4: Proximity to Pocket Parks

Recreational Resources Element

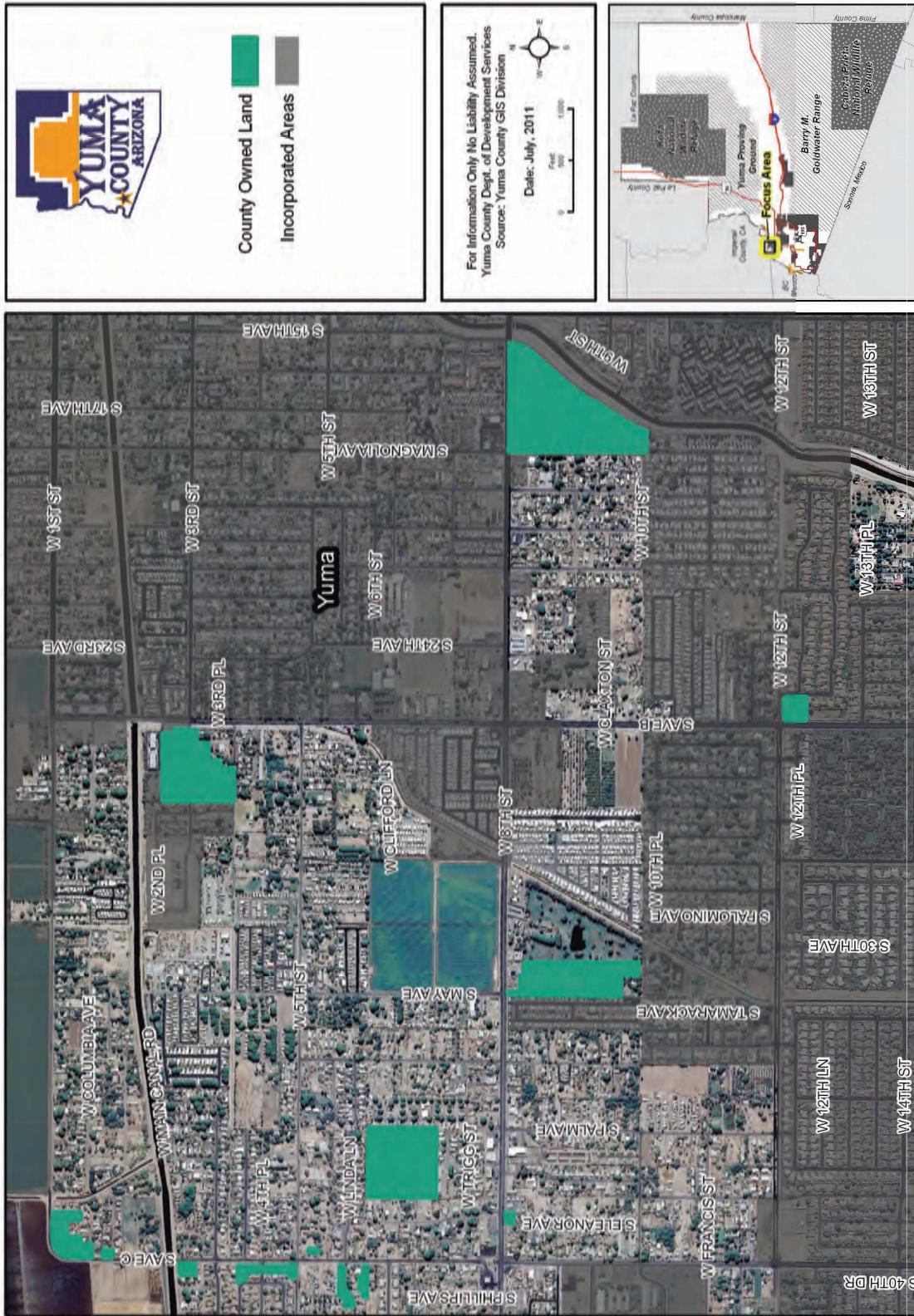
Recreational Resources Element - County Owned Parcels



Map 5: County Owned Land, Foothills Area

Recreational Resources Element

Recreational Resources Element - County Owned Parcels



Map 6: County Owned Land, Avenues B & C Colonia Area

5.8 Recreational Resources Policies and Priorities

- RRPP.1:** Reduce the percentage of the population of unincorporated Yuma County that lives more than five miles away from a developed park.
- RRPP.2:** Where practicable and desirable and when a funding mechanism for construction and operations has been established, utilize retention basins in new residential developments as neighborhood parks
- RRPP.3:** Adopt policies and regulations that encourage the development of parks and recreational facilities.
- RRPP.4:** Yuma County will promote parks by permitting flexibility and providing bonus density in design standards for residential development.
- RRP.5:** New residential development should occur in a manner that enhances parks and recreation opportunities.
- RRPP.6:** Yuma County will work at partnering with Marine Corps Air Station-Yuma, Bureau of Reclamation, Bureau of Land Management, Arizona State Land Department, Cocopah Indian Nation, irrigation districts, school districts and other governmental entities in promoting the maintenance of existing parks and the establishment of new parks.
- RRPP.7:** Using the 2006 Yuma County Parks, Open Space and Trail Master Plan as a starting point, continue to identify and plan for desired park, recreational facility and trail improvements.
- RRPP.8:** Yuma County will work to identify ideal locations for parks, recreational facilities and trails.
- RRPP.9:** Encourage and work with all relevant parties to complete specific parks and recreational projects that have been suggested by and identified as highly desirable by Yuma County citizens.
- RRPP.10:** Yuma County will prepare a study of parks and recreation facility needs for the Foothills Planning Area.
- RRPP.11:** The Foothills Parks and Recreation Study will identify the need for athletic fields, passive parks playgrounds, dog parks and community facilities in the Foothills Planning Area.
- RRPP.12:** The Foothills Parks and Recreation Study will identify potential funding options for potential parks and recreational facility enhancement in the Foothills area which will include the identification of potential funding sources for identified parks and facilities.

5.8 Recreational Resources Policies and Priorities: (continued)

- RRPP.13:** Develop a partnership between Yuma County and Hyder Elementary School District No.16 to develop a community park at Dateland School.
- RRPP.14:** Yuma County will encourage and work with all relevant parties to restore a portion of the Gila River and include along with this restoration recreational facilities such as trails and ramadas.
- RRPP.15:** The need for additional boat docking, storage and trailer parking will be considered when any changes are made to a land use designation or zoning district at Martinez Lake.
- RRPP.16:** Yuma County will work with community leaders to facilitate the creation of parks in the Yuma Valley.
- RRPP.17:** Partner with local schools including Arizona Western College in developing recreational resources at school sites that could be used by the entire community.
- RRPP.18:** Work with the Marine Corps Air Station to keep the authorized recreational trails on the Barry M. Goldwater Range open to the general public in such a way as to protect the natural environment.
- RRPP.19:** Keep the northern Mohawk Mountains open.
- RRPP.20:** Develop impact fees on new development as a method of financing the construction of new parks, other recreational resources and for preserving open space.
- RRPP.21:** Work with local Native American nations to better identify culturally sensitive lands.
- RRPP.22:** Protect culturally sensitive historical sites.
- RRPP.23:** Enhance stewardship of historical artifacts and develop incentives (tax breaks) for preservation.
- RRPP.24:** Amend the Subdivision Regulations to require the establishment of parks with new development and create a mechanism that would provide for their upkeep.
- RRPP.25:** Develop a means to discourage inappropriate ATV usage.
- RRPP.26:** Examine the possibility of working with the Yuma Union High School District to develop joint use recreational facilities at the potential new high school on Fortuna Road.

Recreational Resources Element

5.8 Recreational Resources Policies and Priorities: (continued)

- RRPP.27:** Designate areas within or near the Drysdale area to a land use designation that would promote the development of green areas (parks).
- RRPP.28:** Designate government owned property along the Colorado River Open Space and Recreational Resources or as Sensitive Areas and Resource Lands.

5.9 Recreational Resources Actions

- RRA.1:** Identify all county owned land that has potential to be developed into a park.
- RRA.2:** Establish methodologies that will allow and encourage dedication of land for parks and recreational resources.
- RRA.3:** Yuma County will review future residential development plans for potential park sites.
- RRA.4:** Establish subdivision standards for open space in large residential developments.
Establish requirements for improvement and maintenance.
- RRA.5:** Coordinate open space conservation and recreational resource efforts within all county departments, municipalities, other counties, state and federal agencies, private organizations and individuals.
- RRA.6:** Identify and map publicly owned land suitable for parks and recreation development.
- RRA.7:** Identify and map right of way corridors suitable for construction of multi-use paths.
- RRA.8:** Enhance park and recreational facilities in the Dateland/East County Planning Area.
- RRA.9:** Improve recreational boating facilities at Martinez Lake.
- RRA.10:** Yuma County will work with local residents, other governmental entities and non-profit organizations to identify possible funding sources and grants to improve and expand publicly accessible boat launch facilities at Martinez Lake.
- RRA.11:** Yuma County will encourage and work with all relevant parties to establish a publicly accessible boat washing facility in order to prevent the spread of invasive species into the Colorado River.
- RRA.12:** Yuma County will encourage and work with all relevant parties to improve existing boat ramps to make them usable at all water levels at Martinez Lake.
- RRA.13:** Yuma County will encourage and work with all relevant parties to maintain and upgrade the Meers Point boating and recreational area.
- RRA.14:** Yuma County will encourage and work with all relevant parties to create and install a kiosk displaying information about recreational facilities, opportunities and regulations in a prominent public place.
- RRA.15:** Yuma County will encourage and work with all relevant parties to construct a waterfront picnic area.

Recreational Resources Element

5.9 Recreational Resources Actions: (continued)

- RRA.16:** Yuma County will develop a detailed recreational plan for government land south of County 19th Street. This would include separate and appropriate areas for off road vehicle recreational, equestrian and hiking uses.
- RRA.17:** Yuma County will construct trails for walking, biking and hiking as opportunities arise in the Dome Valley/Wellton area.

Section Six—Circulation Element

6.1 Introduction

This section presents the Circulation Element of the Yuma County Comprehensive Plan. This element supersedes the previous circulation element affecting the unincorporated area of Yuma County. The Circulation Element is defined as a compilation of objectives, policies, actions, maps and programs to guide the future development of the various modes of transportation. Specifically, this element shows the general location and extent of existing and proposed major thoroughfares, transportation routes, terminals and other local public utilities and facilities associated with the Land Use Element of the Comprehensive Plan. An efficient, integrated transportation system is essential to maintain the quality of life and facilitate the economic growth of Yuma County.

Yuma County, to a great extent, is an agricultural region. Other industries that help support the region's economy are tourism and government. It is noteworthy that the vast majority of jobs are concentrated in incorporated areas like the cities of Yuma, San Luis, Somerton and the Town of Wellton. The Marine Corps Air Station-Yuma (MCAS) and Yuma Proving Ground (YPG) also provide economic stability by employing more than 8,000 people. Another major employer located in the City of Yuma is the Yuma Regional Medical Center, employing over 2,000, thus making the City of Yuma an important transportation point.

Yuma County has also enjoyed an influx of seasonal residents for decades. Visitors from throughout the United States and Canada call Yuma County their second home. Another important inflow is the seasonal agricultural workers. All of these place a transportation demand on Yuma County's roadway system.

Roadways, railways and airways provide multiple services to the communities and citizens of Yuma County. This manifests the importance of the Circulation Element as it contains summaries of other agencies' plans and fully detailed maps of Yuma County showing the present condition and future roadway needs.

This element is organized in the following manner: 1) Introduction, 2) Transportation Authority and Current Plans, 3) Presentation of Roadway Network, 4) Presentation of Railway Network, 5) Presentation of Aviation Network, 6) Visual Corridors, 7) Circulation Policies and Priorities, and 8) Circulation Actions. In summary, the Circulation Element provides an overview of existing plans and studies then compares their objectives, policies, goals and programs at both the state and regional levels. It also identifies thoroughfares within the local governmental unit by function. Key issues and concerns originating from public participation are then addressed. Attention is then given to future transportation projects and visual corridors.



The Gila Mountains, photo credit to <http://www.travelpod.com/travel-blog-entries>

Transportation in Context

The vehicular transportation system in Yuma County is comprised of 1431.24 lane miles of paved and 1500 of unpaved roads that are maintained by Yuma County and the Arizona Department of Transportation (ADOT) as shown in Table 1 below. Railways are also an important component of the transportation system with 199.57 track miles. This includes main tracks, yard tracks, inactive mainline tracks for future use and inactive yard tracks. As for aviation, Yuma County is the home to the Yuma International Airport which is a shared-use airport with Marine Corps Air Station-Yuma.

Table 1: Yuma County Transportation Context

	LANE MILES 2000-2010	LANE MILES 2010-2020
Arizona Department of Transportation (ADOT)	807	853 ⁽¹⁾
Yuma County (paved)	500	578.24 ⁽²⁾
Yuma County (Unpaved)	1500	1500 ⁽²⁾
Averaged Paved Road Life	30 years	
Averaged Household Vehicle Trips Per Day	10 trips	
Average Vehicle Trip Length	8.7 miles	

Table 1: Yuma County Transportation Context



Interstate 8 looking southeast., photo credits to <http://www.aaroads.com>

(1) Information obtained from ADOT

6.2 Transportation Authority

Yuma County is a main partner in the Yuma Metropolitan Planning Organization (YMPO), which represents all incorporated jurisdictions within Yuma County for the purpose of planning the expenditure of federal and state transportation funds. The primary goal of YMPO, as stated in the 2011-2033 Regional Transportation Plan, is to “provide the continual development of a complete, dependable, efficient, safe, aesthetic and economical transportation system, bearing in mind that our quality of life is paramount and that transportation needs must recognize the specific demands of government and businesses, including those of urban areas, rural and agricultural interests and military operations.”

The County has no legal obligation to incorporate plans developed and adopted by the YMPO Executive Committee into the *Yuma County 2020 Comprehensive Plan*. Further, YMPO is advisory to the County with regard to road construction and planning. This responsibility, in combination with the vested countywide authority and representation, makes the County a proponent of YMPO and its plans.

Existing Plans

2011—2015 Five-Year Transportation Facilities Construction Program:

Prepared by: ADOT, 2010

Scope: The Arizona Department of Transportation (ADOT) is mandated by state law to be responsible for constructing and maintaining all interstate and state highways in Arizona and providing financial assistance to public airports for airport development projects. Fulfilling this responsibility includes extensive public participation and sophisticated technical evaluation known as the Priority Programming Process. The process culminates in the Five-Year Transportation Facilities Construction Program for highways and airports. This publication identifies programs and projects programmed for State fiscal years 2011 through 2015 (see Table 4).

Elements: Financial Summary of All Programs, Summary of Dollars by County and Summary by Resources, Highways Programs, Highways Subprograms, Summary of Dollars by Freeways, MAG Area, Regional Transportation Plan Freeway Program, System wide.

2010—2033 Regional Transportation Plan (RTP):

Prepared by: Ayres Associates Inc. in association with Makineh Professional Services in April, 2010.

Scope: The 2010-2033 Regional Transportation Plan is a multi-modal plan with the premise that it serves people efficiently, affordably and safely. In addition to the traditional roadway improvements, this plan identifies investments in public transportation, bicycling and walking to promote health, environmental quality and mobility for those who do not have access to cars or those who choose to use other modes.

Existing Plans (Continued)

Elements: Travel and Socio-Economic Characteristics, Public Participation, Roadway, Transit, Non-Motorized Transportation, Safety, Airport, Rail/Port/International Border.

2009 Yuma International Airport Master Plan Update:

Prepared by: Ricondo & Associates, Inc. in Association with Geodetix and Nicklaus Engineering.

Scope: The 2009 Yuma International Airport Master Plan Update describes the analyses and assessments conducted during the preparation of the Airport Master Plan and provides the results of those efforts. It includes discussion of the previous Master Plan Update, a brief history of the Airport and a general discussion of the goals underlying the current Airport Master Plan. The chapters of this report provide an inventory of Airport facilities, document the aviation demand forecasts, discuss the demand/capacity analyses and facility requirements, presents the alternatives considered and the resulting Airport Development Plan⁽¹⁾(ADP), defines an implementation plan and financing plan for the recommended ADP and presents an overview of potential environmental effects associated with the recommended ADP.

Elements: Airport Inventory, Aviation Demand Forecast, Demand/Capacity Analyses and Facility Requirements, Alternatives and Airport Development Plan, Financial Plan and Environmental Overview.

FY2012—FY2016 Capital Improvement Plan:

Prepared: Department of Development Services Budget Review Team

Scope: The Yuma County Capital Improvement Plan (CIP) is a five-year schedule of public physical improvements to the county's infrastructure. The CIP sets forth proposed expenditures for systematically constructing, upgrading, expanding, remodeling and replacing of "public improvements" within the foreseeable five-year future. The CIP will establish a schedule for each project identified according to its priority and funding resources available. Because the CIP identifies where County facility improvements will be done, where County facilities will be expanded and where County dollars will be spent, it is more than a schedule of expenditures. It is a statement of budgetary policy and a planning document.

Sections: Highway Projects, Public Facilities, Storm water Control, Housing Projects, Law Enforcement, General Government (Information Technology Services) and Community Development Projects.

(1) The Airport Development Plan is form by the preferred development options and alternatives presented in chapter 5.6 of the Yuma International Airport Master Plan Update.

6.3 Roadway Network

Thoroughfares are the community's mobility life line. Not only do they allow people to commute to the places where they live, work, recreate, shop and worship, but they also link them to other communities. They allow services to reach their destinations and allow for the movement of goods to places of distribution. From 2000 to 2010, Yuma County's population has grown 22.32%. Consequently, Yuma County must plan for new rural roads and the expansion and improvement of existing roads that connect to major traffic generators and facilitate the movement of people and goods in a safe and effective manner.

In the 2010 Comprehensive Plan, Yuma County residents indicated that traffic was the number one quality of life issue. According to the Plan, transportation was and is one of the most critical factors affecting the day-to-day lives of county residents. This statement was supported by information obtained from selected traffic volume data collection sites throughout the county illustrating the increased volume on existing roadway systems from 1991 through 2009 (Table 2). Since then new vehicle traffic counts have been conducted in the same locations as they were held in 2000. At some points the trend was the same, while in others traffic was reduced. This is the result of enhancements to the road network and public transportation implementation.

Table 2: Percent Change in Selected Yuma County Traffic Counts⁽¹⁾

Location	1991	2000	2009	% Change
Avenue 64E North of I-8 (Dateland)	420	550	512	-7%
Avenue 29E North of I-8 (Town of Wellton)	1,210	1,863	2,765	48%
Fortuna Road South of Frontage Rd (Foothills)	6,950	11,903	12,570	5.6%
County 19th Street East of U.S. Hwy. 95 (Gadsden)	2,650	7,533	5,399	-28%

Table 2: Percent change in selected Yuma County traffic counts.

The need to satisfy the increasing vehicular traffic during the planning period of 2010-2020 is present. The capacity and level of service of the existing road network is and must be constantly evaluated and improved. The promotion of transportation alternatives and adaptation to existing ones should be encouraged.

The Citizen Advisory Groups (CAGs) made recommendations on transportation improvement projects for their respective planning areas. The recommendations include maintenance of existing roads, improving roads to a reliable all weather standard, the periodic grading of primitive roads employing dust control measures, increasing safety at roads with proper signage, improving the lighting on busy corners, strengthening the rural transportation system, constructing new roads to current Yuma County roadway standards and resolving road flooding.

(1) Yuma Metropolitan Planning Organization

Circulation Element

Yuma County's roadway system has to provide support for various transportation modes and at the same time satisfy land use needs. Yuma County maintains approximately 2,078 lane miles of roadways within its unincorporated area. These roads provide access to parcels and serve as major thoroughfares between urban areas and other counties.

The linkage between the internal transportation network (county and cities) and the external transportation network (state and federal) has to be efficient and effective. In order for the Circulation Element to be consistent with regional and local general plans the implementation of goals, objectives and policies needs to be adopted. This element incorporates recommendations from the YMPO 2010-2033 Regional Transportation Plan.

Level of service (LOS) is a standard measure of traffic service along a roadway or intersection that determines the effectiveness of the elements of the transportation infrastructure. It categorizes traffic flow with corresponding safe driving conditions. This concept also applies to transit. LOS standards use letters from A through F (Table 3) with A being the best and F being the worst.

TABLE 3: LEVEL OF SERVICE	
LOS	DESCRIPTION
A	Free Flow; virtually no delay
B	In the range of stable flow, but the presence of other users in the traffic stream begins to be noticeable.
C	Still in the range of stable flow, but marks the beginning of the range in which the operation of individual users becomes significantly affected by others.
D	High-density but still stable flow. Speed and freedom to maneuver are severely restricted, and the driver or pedestrian experiences a generally poor level of comfort and convenience.
E	Represents operating conditions at or near the capacity level. All speeds are reduced to a low but relatively uniform value.
F	Traffic stream is defined as forced or breakdown flow. This condition exists wherever the amount of traffic approaching a point exceeds the amount which can traverse the point.

Table 3: Level of Service

Yuma County will strive to maintain a LOS of D or better on all roadways. When measuring LOS, Yuma county shall use the criteria established by the Highway Capacity Manual⁽¹⁾.

(1) Highway Capacity Manual is published and updated by the United States' Transportation Research Board

Robert A. Vaughn Expressway/SR195 Level of Service

The Robert A. Vaughn Expressway/State Route 195 was opened to traffic September 4, 2009. The Arizona Department of Transportation (ADOT), in conjunction with the Federal Highway Administration (FHWA) and the Yuma Metropolitan Planning Organization (YMPO) identified the need to provide a direct transportation route between the then future commercial international Port of Entry (POE) near San Luis, Arizona and Interstate 8 (I-8). YMPO anticipated by 2015 that more than 1,500 commercial vehicles per day (vpd) would be using the existing POE. In addition, YMPO expects that the total vehicular traffic (passenger cars and commercial vehicles) at the existing POE may be as much as 50,000 vpd in 2015.

ADOT uses a threshold of 10,800 vpd for level of service (LOS) C on a two-lane rural-highway. According to ADOT and American Association of State Highway and Transportation Officials' (AADHTO) guidelines, traffic volumes in excess of 10,000 vpd warrant consideration of four or more traffic lanes to provide acceptable operation and maintenance at a LOS C. Based on the projected traffic volumes, a four-lane cross section is warranted for the entire extent of SR195 to maintain a Level of Service C⁽¹⁾.

Roadway Network Projects

The Circulation Element continues to build on the previous plans prepared by the YMPO. Several projects have been implemented since the completion of the 2001-2023 RTP. These projects addressed the continued growth of the area. The notable ones include:

- SR195 from Avenue E to 32nd Street
- 24th Street widening from Avenue 6E to Avenue 9E
- Avenue E widening San Luis POE II to SR195

Despite the current economic conditions, population and employment growth will continue, and it is important that improvements to the roadway system accommodate that growth at an acceptable level of service. Any existing or projected volume to capacity ratio that exceeds 0.85 indicates a capacity deficiency that was evaluated to identify potential improvements. An unacceptable level of service can be addressed in different ways including widening the subject street, widening a parallel street or constructing a new parallel street. Additionally, roadway segments that promote grid continuity and provide the backbone network in developing areas should be considered. All these factors were examined in developing the roadway element for the 2010-2033 RTP.

The need for transportation improvements in the roadway network needs to be supported from analysis of traffic volumes and levels of service based upon the levels of growth. This analysis needs to be based on the latest population, housing and employment values.

The different roadway projects are presented in the Roadway Network Project table shown in the next page, which is a compiled list extracted from YMPO's roadway element projects. YMPO's project list is presented in five-year periods from a revenue standpoint. Only the first five year period is typically described as programmed and the anticipated revenues are more reliable. Beyond the first five years the revenue is less predictable and priorities can change⁽¹⁾. See Map 1.

(1) 2033 Regional Transportation Plan

Table 4: Roadway Network Projects

Project	Location	Description	Agency
U.S. Highway 95 Widening	Avenue 9E to Aberdeen Road	Reconstruct Fortuna Wash Bridge and Fortuna Road intersection, widen roadway from two lanes to four lanes	ADOT
Interstate 8 Pavement Preservation	California State line to Fortuna Road	Pavement preservation project	ADOT
12 th Street-Phase 1	Avenue A to Avenue B	Making 12 th Street full connect between Avenue A and Avenue B by bridging the East Main Canal and constructing a new two lane road between 21 st Drive and 14 th Avenue	City of Yuma
16 th Street Widening	45 th Avenue to Avenue D	Reconstruction and expansion of road to four lanes	City of Yuma
16 th Street Widening	6 th Avenue to Arizona Avenue	Widen 16 th Street to a 7 lane cross-section, realign 7 th Avenue and 8 th Avenue to form a single intersection, provides for restricted access from minor side streets	City of Yuma
1 st Avenue Reconstruction	12 th to 16 th Street	Reconstruct 1 st Avenue from 12 th to 16 th Street	City of Yuma
1 st Street Reconstruction	Avenue B to Figueroa Street	Reconstruct with curb, gutter, sidewalk, landscaped median, storm drainage and streetlights	City of Yuma
24 th Street Widening	Avenue B to Avenue C	Reconstruction and widening to four lanes	City of Yuma
24 th Street Widening	Avenue C to Avenue D	Reconstruction and widening to six lanes	City of Yuma
32 nd Street Reconstruction	Avenue B to Avenue C	Reconstruction to current City of Yuma standards	City of Yuma
32 nd Street	Pacific Avenue & 32 nd Street	Add second dedicated eastbound left turn lane and convert existing left-turn lane to a through lane	City of Yuma
32 nd Street Mill & Replace	Catalina Drive to Avenue 3E	Mill ¾" of existing asphalt pavement and replace	City of Yuma
32 nd Street Expressway	Avenue 3E to Avenue 5E	Widen existing street to six lanes	City of Yuma
32 nd Street Widening	Avenue C to Avenue D	Reconstruction and widening to six lanes	City of Yuma
4 th Avenue Mill & Replace	Catalina Drive to 4 th Street	Mill 4" of existing asphalt pavement and replace	City of Yuma
8 th Avenue Widening	24 th Street to 32 nd Street	Reconstruction and expansion of road to four lanes, improvements to intersection geometry at Catalina Drive and signalization of Catalina Drive	City of Yuma
Arizona Avenue Reconstruction	32 nd Street to 40 th Street	Reconstruction to current City of Yuma standards	City of Yuma
Avenue 10E	32 nd Street to 40 th Street	Widening of existing portion of road to four lanes and construction of uncompleted segment	City of Yuma

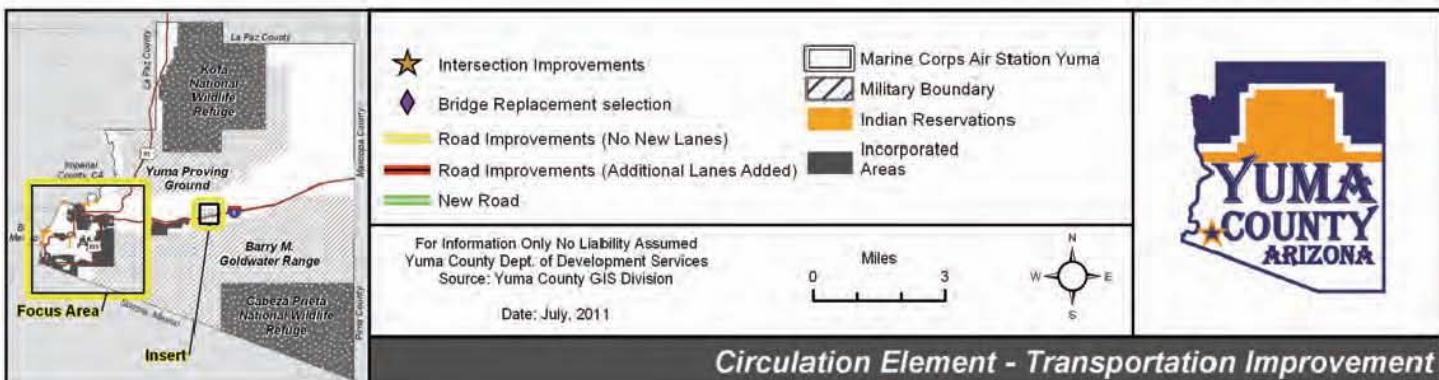
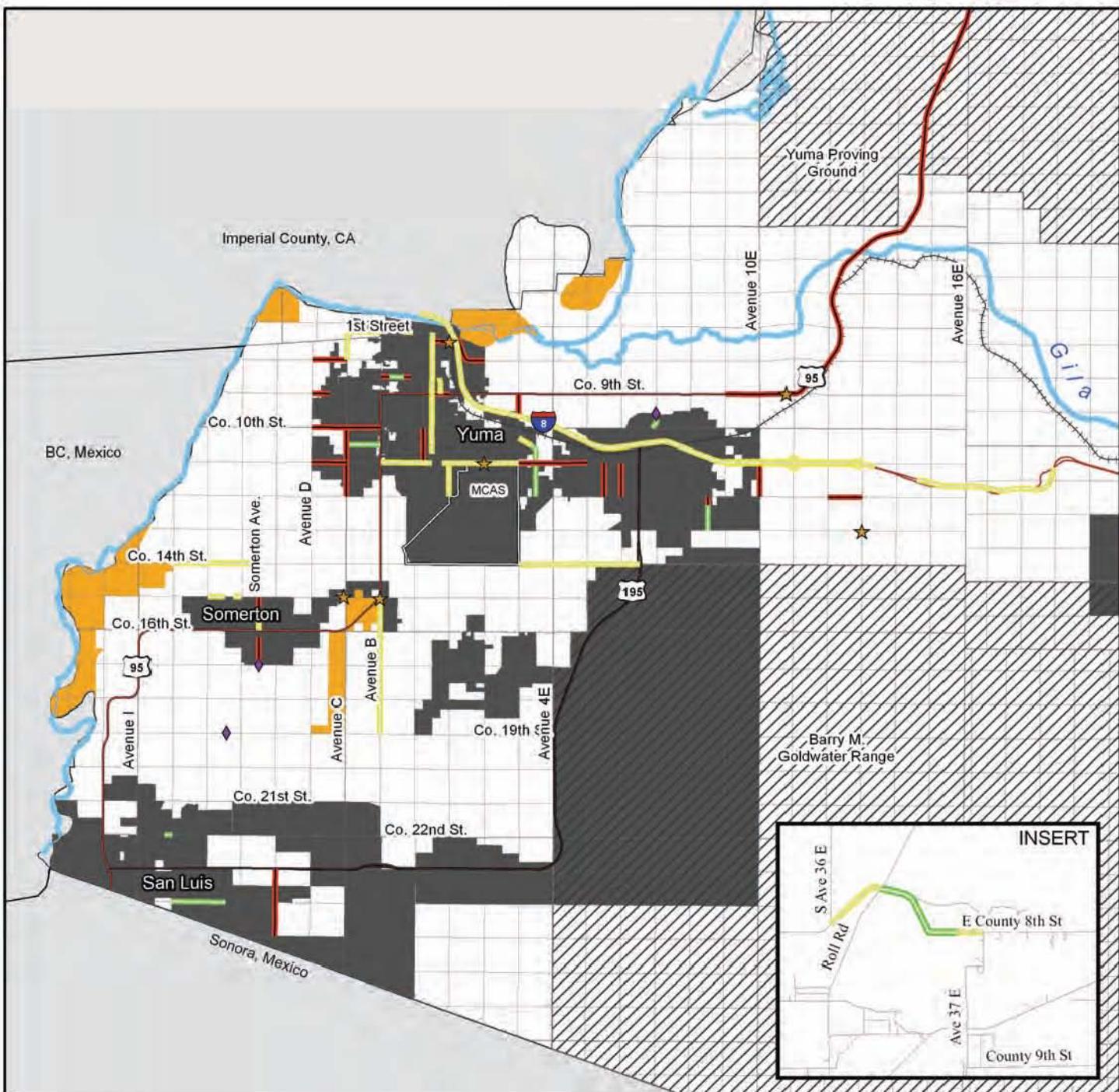
Circulation Element

Project	Location	Description	Agency
Avenue 3½E	Avenue 3E & 24 th Street to 40 th Street	Construct a six lane road along the B Canal connecting Avenue 3E to Avenue 3½E, the widening Avenue 3½E to six lanes south to 40 th Street	City of Yuma
Avenue 5½E Widening and Extension	32 nd Street to 40 th Street	Widening of existing portion of road to four lanes and construction of uncompleted segment	City of Yuma
Avenue 6E Widening	32 nd Street to 40 th Street	Widen existing street to five lanes	City of Yuma
Avenue 8½E Widening and Extension	32 nd Street to 48 th Street	Widening of existing road to four lanes and construction of uncompleted segments between 40 th Street and 48 th Street	City of Yuma
Avenue C Widening	24 th Street to 32 nd Street	Reconstruction and widening to four lanes	City of Yuma
Avenue C Widening	32 nd Street to 40 th Street	Reconstruction and widening to four lanes	City of Yuma
Giss Parkway Widening	4 th Avenue to Interstate 8	Reconstruction and widening to four lanes	City of Yuma
Giss Parkway Extension	Interstate 8 to Pacific Avenue	Full construction of Giss Parkway, four lanes from Interstate 8 to Pacific Avenue	City of Yuma
Avenue 7E Reconstruction and Extension	16 th Street to 24 th Street	Reconstruction of an existing portion of road to City of Yuma Standards, construction of uncompleted segments between 16 th Street and 24 th Street and construct a new crossing of the South Gila Valley Canal	City of Yuma/Yuma County
Frontage Roads	Avenue 9E to Foothills Boulevard	Reconstruction to 2-lane road with a continuous left hand turn lane, curb and a 7 foot sidewalk on one side only, along with intersection improvements	City of Yuma/Yuma County
Avenue C Reconstruction	8 th Street to 1 st Street	This roadway section consists of a 54 foot wide curb to curb traveled way with curb, gutter and sidewalks. There will be a central 14 foot left-turn lane with one 12 foot travel lane and one 8 foot shoulder on each side.	Yuma County
County 8 th Street Widening	Avenue C to Avenue D	Reconstruct the existing 2-lane roadway section to an urban five lane section with curbs, sidewalks and related drainage improvements	Yuma County
County 12 th Street Widening	Scottsdale Road and Foothills Boulevard	Staged widening of County 12 th Street (City 40 th Street) to a five lane urban roadway between Avenue 12E to Foothills Boulevard and three lanes between Scottsdale Avenue to Avenue 12E	Yuma County
County 8 th Street Extension	Avenue 36E to Avenue 37E	Extend the existing roadway around Antelope Hill between Avenue 37E to Mohawk Valley roadway (Avenue 36E Extension)	Yuma County
Bridge Replacement	County 19 th Street at the Main Drain	Bridge Replacement	Yuma County

Circulation Element

Project	Location	Description	Agency
Intersection Improvement	Foothills Boulevard and 48 th Street	Traffic signals may be considered at this intersection, improvements to retain the storm water on the existing Foothills Boulevard are recommended to retain the water in the parkway areas.	Yuma County
Intersection Improvement	County 15 th & Avenue C	Avenue C south of County 14 th Street curves and becomes County 15 th Street. A reduced speed limit is posted through this section. The roadway curve will be redesigned and rebuilt for a uniform speed limit.	Yuma County
Avenue E Widening	Mexican Border to S.R. 195	Widen existing two lane road to four lanes	City of San Luis
County 22 nd Street	9 th Avenue to 10 th Avenue	Construct a new two lane road	City of San Luis
County 24 th Street	10 th Avenue to Avenue F	Construct a new two lane road	City of San Luis
Intersection Improvement	Avenue B and County 15th Street	Intersection Improvements	City of Somerton
Somerton Avenue Widening	Fern Street to County 17th Street	Widen to four lanes	City of Somerton
Somerton Avenue Widening	Jefferson Street to County 15 th Street	Widen to four lanes	City of Somerton

Circulation Element



Map 1: Transportation Improvement

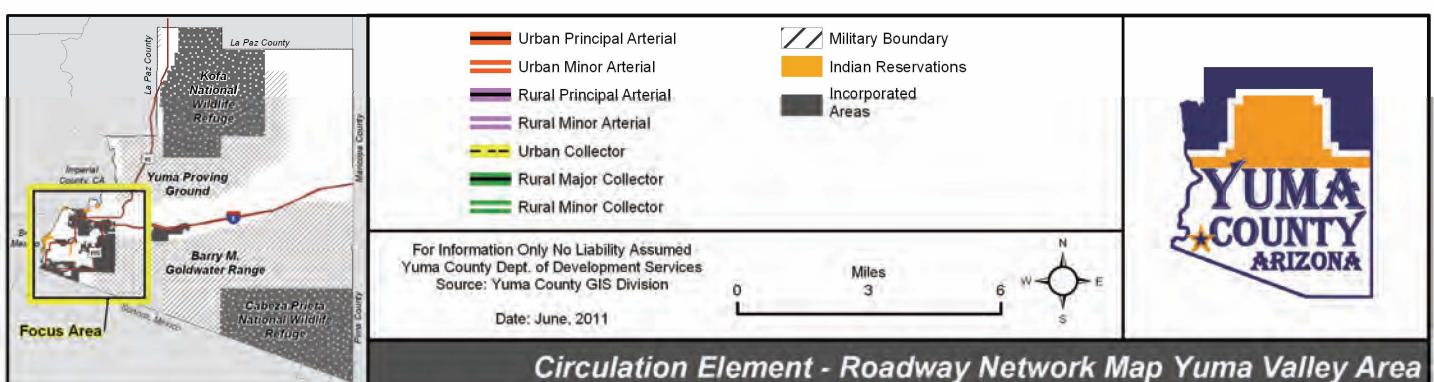
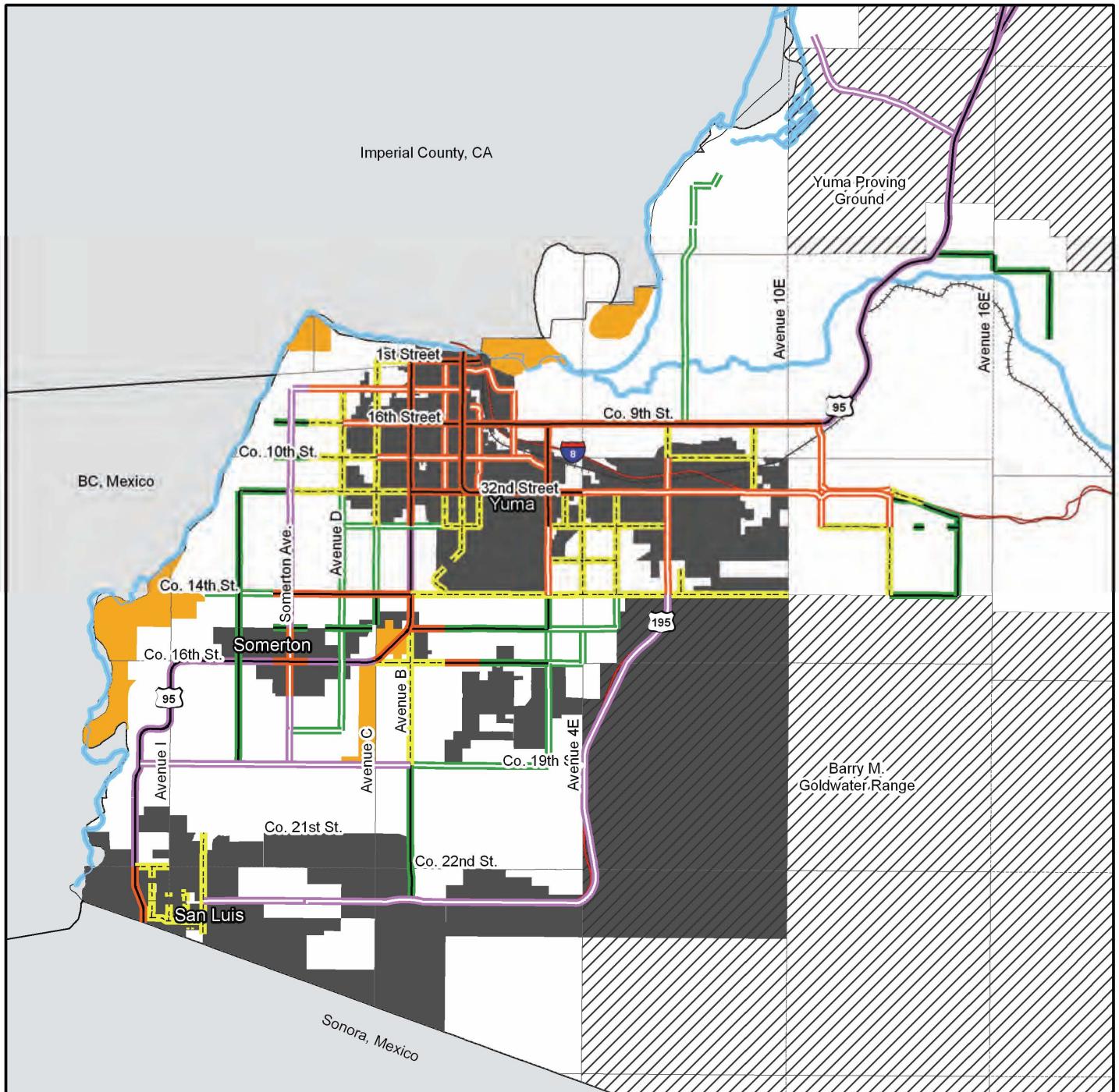
Functional Classifications

Functional classification defines the hierarchy of streets in a roadway system. The federal functional classification of roadways in Yuma County is shown below. These classifications are standardized nationwide by the Federal Highway Administration (FHA). In general, the interstate and arterials provide a high level of mobility for the traveling public with minimal allowance for access, while the collectors and local streets provide for residential and non-residential access. Individual roads and streets do not serve travel independently in any major way. Rather, most travel involves movement through a network of roads. It becomes necessary then to determine how this travel can be channelized within the network in a logical and efficient manner. Functional classification defines the nature of this channelization process by defining the part that any particular road or street should play in serving the flow of trips through a highway network. Understanding the functionality of the road network is helpful when considering the location of future growth. Adequate access to the rest of the community should be a key consideration in the planning process for future growth. See map 2 and map 3.

Federal Functional Classifications

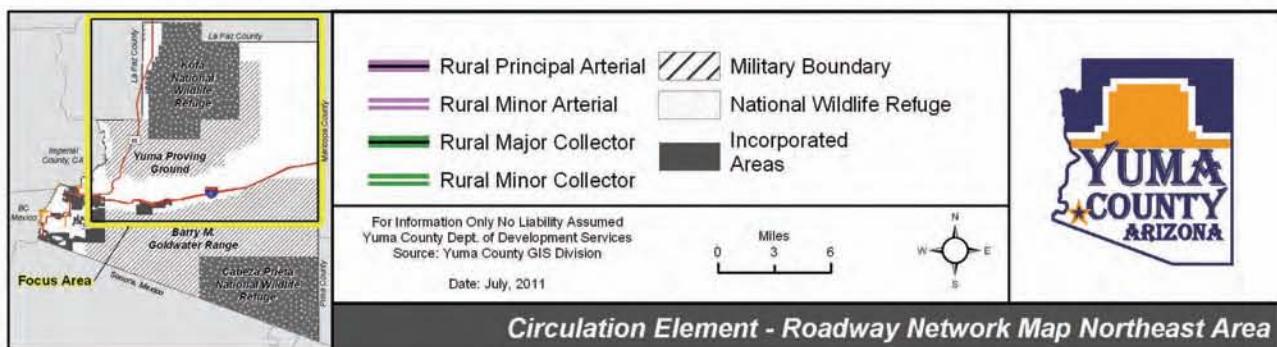
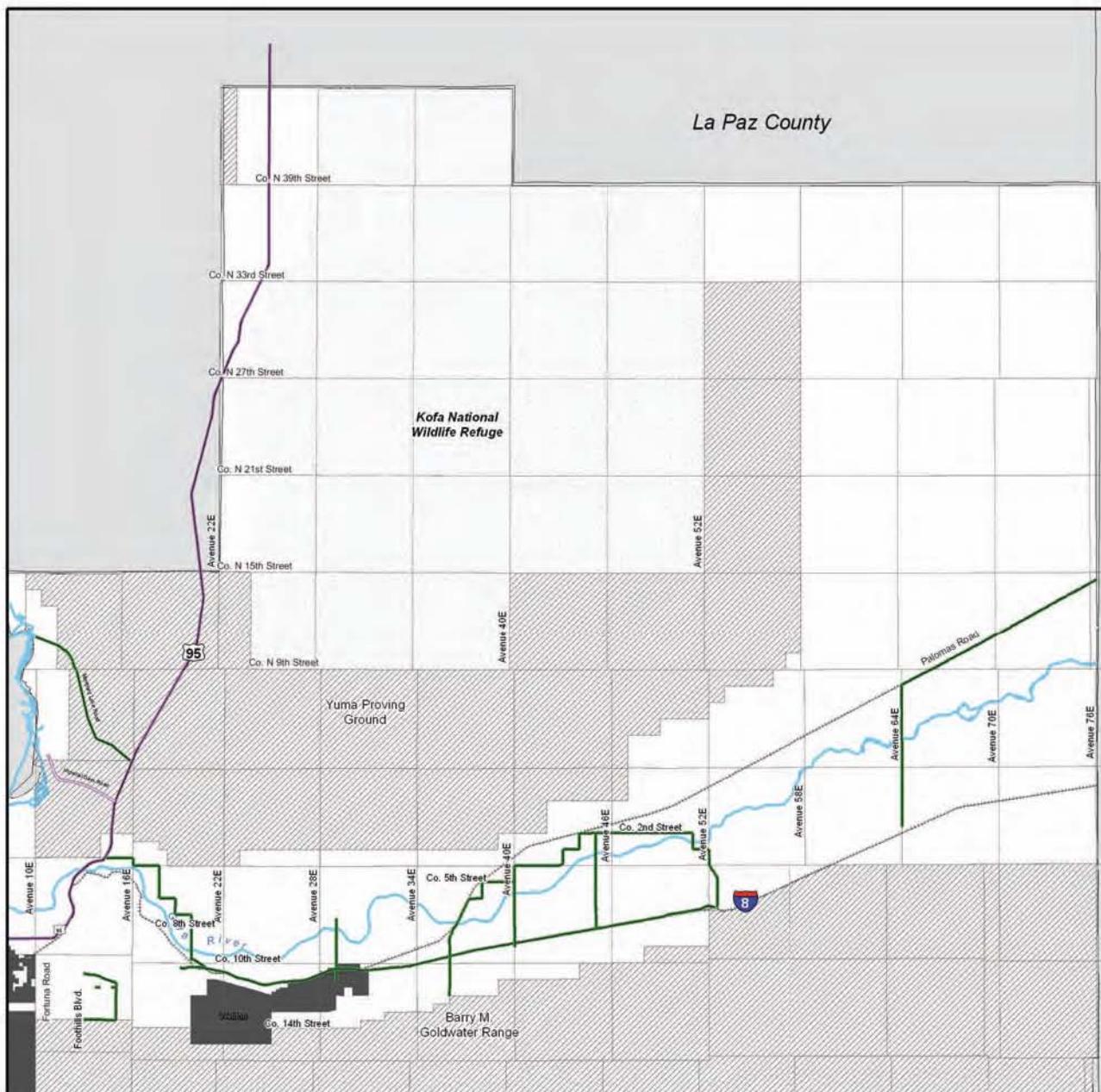
- **Urban Principal Arterial** - Routes which carry through traffic and most of the trips entering/leaving a Federally-designated Urban Area. They provide continuity for all rural arterials that intercept the urban boundary.
- **Rural Principal Arterial** - Corridor movement suitable for substantial statewide or interstate travel between larger population centers.
- **Urban Minor Arterial** - Within a Federally designated Urban Area these roads interconnect with and augment the urban principal arterial system. They distribute travel to geographic areas smaller than those of higher systems.
- **Rural Minor Arterial** - Link cities, large towns and other traffic generators that are capable of attracting travel over long distances. Integrates interstate and inter-county service. Have spacing consistent with population density so all developed areas are within a reasonable distance from the arterial system.
- **Urban Collectors** - Provide both land access and traffic circulation within urban residential neighborhoods and commercial and industrial areas in Federally designated Urban Areas. Route density is much higher than in rural areas.
- **Rural Major Collector** - Link nearby larger towns or cities, or with routes of higher classifications (serves more important intra-county travel corridors which could connect consolidated schools, shipping points, important agricultural areas, etc.).
- **Rural Minor Collector** - Spaced consistent with population density to accommodate local roads within reasonable distance of collector roads. Provides service to smaller communities. Links locally important traffic generators with the arterial system.

Circulation Element



Map 2: Roadway Network Map - Yuma Valley Area

Circulation Element



Map 3: Roadway Network Map—Northeast Area

Public Transit History

Since 1999, the Yuma County Area Transit (YCAT) system has grown from a transit service offering only paratransit service to the current mix of demand-responsive and fixed-route service. *Paratransit* is a term used to define transit service that operates in response to calls from passengers or their agents to the transit operator, who then dispatches a vehicle to pick up the passengers and transport them to their destination. It does not operate over a fixed route or a fixed schedule. Yuma County's paratransit is known as Dial-a-Ride.

Before 1999, only private transportation companies operated transit service in Yuma County, with taxis serving the urbanized areas and private van services providing transportation between San Luis and Yuma. The Saguaro Foundation began operating Dial-a-Ride funded by YMPO in February 1999. YCAT's fixed-route service began in 2000 with service between San Luis and Yuma. YCAT service between Yuma and Foothills was initiated in 2001, but the ridership was not considered high enough to justify the cost, and the system was shortened to terminate at Arizona Western College.

After financial and operating difficulties in 2003 nearly caused the fixed-route transit to shut down, the City of Yuma and a consortium of local groups contributed additional funding to the system. The YMPO selected a new operating contractor and the service began to grow, and an additional route to Wellton initiated service in January 2006. Both demand-response and fixed-route service is administered and funded by the YMPO. YMPO also owns all the vehicles for the fixed-route and demand-response service and leases the 14th Street and Atlantic Avenue maintenance facility.

Yuma County Intergovernmental Public Transportation Authority

YCIPTA is an Intergovernmental Public Transportation Authority (IPTA) that was formed on December 13, 2010 by the Yuma County Board of Supervisors under Resolution No. 10-52 to administer, plan, operate and maintain public transit services throughout Yuma County, including within the political jurisdictional boundaries of the cities of Yuma, San Luis, Somerton, the town of Wellton and the unincorporated Yuma County areas. Northern Arizona University is also a member of the IPTA. Recent legislation will allow the Arizona Western College (AWC) and the local tribal governments to join the authority.

Current Studies

Yuma County is the sponsor of a Transit Needs Study funded by ADOT that will be completed by December 2011. The study will review existing conditions and project future growth and economic conditions to make final recommendations for future transit services based on various levels of funding. In order to determine the best type of transit system available to county residents, a key component of the study is the review and development of service alternatives based on established transit goals and objectives. In addition, the study consultants will conduct a peer-city review to determine how transit services other communities with characteristics similar to those of the Yuma region. Funding will be a continued source of discussion related to transit, and the study results will identify funding sources and amounts.

6.4 Railway Network

The Union Pacific Railroad's (UPRR) Sunset Route was originally constructed between 1877-1887. The Sunset Route crosses Yuma County on its run from the Port of Los Angeles, California to El Paso, Texas and points beyond.

In 1926, work was completed on a rail link called the Wellton Branch between the Sunset Route at Wellton and Phoenix, Arizona in order to provide a direct link between Phoenix and points to the west. The Sunset Route main line passes to the south of Phoenix. In 1996, this track was closed between Roll in Yuma County and Arlington in Maricopa County because of low traffic volumes and high maintenance costs. Though out of service, these tracks remain in place and have not been officially abandoned by Union Pacific and are currently classified as inactive.

The Yuma Valley Railroad (YVR) line was originally built in 1914 by the U.S. Bureau of Reclamation along the newly built Colorado River Levee to help maintain and allow for emergency repair of the levee during times of high water. It was operated for nearly 20 years until flood control projects farther up river removed the need for this line for flood control purposes. In 1983 the Interstate Commerce Commission (ICC) approved the abandonment of the portion of the line south of the Yuma Desalting Plant. Prior to 2005, a three-car tourist train pulled by a vintage diesel engine operated on the 6.1-mile route between downtown Yuma and the Yuma Desalting Plant. In 2005 the Bureau of Reclamation declared the tracks inadequately maintained for passenger traffic. Furthermore, the U.S. Department of Homeland Security and the Arizona National Guard had begun to utilize the YVR right-of-way for border patrol and military operations, blocking the tracks south of the Yuma Desalting Plant. The track and rails remain in place as of 2011.

The McElhaney Cattle Company located near Roll, Arizona operates one of the ten largest cattle-feed facilities in the United States. The Union Pacific Railroad has granted McElhaney railroad right-of-way over six miles of the Wellton Branch from Wellton to McElhaney's cattle-feed facility located northeast of Wellton. Built in the 1950s, it houses over 130,000 head of cattle which consume over 11,000 carloads of grain per year. McElhaney Cattle Company operates one locomotive for switching to their grain silos. 100-car grain trains arrive and deliver twice a week, with McElhaney crews assuming operation responsibilities from Union Pacific crews at Wellton. See map 4.



Union Pacific. Photo credit: Yuma County, DDS, Community Planning

Union Pacific's Double Tracking Project

In 2007, there were approximately 49 trains per day on Yuma County's stretch of track, carrying a total annual load of about 168,000 carloads of freight. Certain portions of the Sunset Route have been double-tracked while preparations for double-tracking of the remaining sections has been completed. Currently, the double tracking project from Los Angeles, California to El Paso, Texas is 64% completed, but the section located in Yuma County will not be a priority over the next 10 to 20 years, as the single railroad track is sufficient to manage the actual train traffic. The Wellton section is doubled tracked. The doubling of the tracks in the remaining portions of Yuma County will be triggered by increased shipping and hauling demand as the national economy improves. Another important factor that will influence the reactivation of the doubling of the tracks is the potential rise of diesel fuel prices which will make shipping by rail more competitive than by semi-tractor trailer by road.

The last part of the track doubling project could be the crossing of the Colorado River. Union Pacific sees the permitting process as a five year task since it involves the crossing of waterways. A major public sector entity involved in this process would be the Army Corps of Engineers. The construction of a new bridge from UP's perspective also looks remote and involves several entities. Depending on the project's location, this could potentially involve tribal lands, the City of Yuma, Yuma County, Army Corps of Engineers and any agency related to historical landmarks. Yuma County residents will play an important key role in the decision for the location of a second bridge for the crossing of a second track.

Short Line from Mexico Project

In 2009, the plan to turn the bay of Punta Colonet in Baja California, Mexico into a deep water mega-container port was announced. The intent is for a port able to handle the next generation vessel and port operations from Asia due to the congestion at the ports of Los Angeles, Long Beach and Oakland. This demand also brought the need to plan for the movement of goods via roadways and tracks into the United States. One of the potential locations to connect into the United States' rail network considered was Yuma County.

The potential construction of a short line in Yuma County could represent a big impact in the community and development depending on its final location. However, Union Pacific has abandoned plans to participate in the construction of the short line coming from Mexico for the proposed port. The reasons mainly have to do with economics and logistics. The project has been placed on hold due to a reduction of the demand and movement of containers between Asia and the United States.

Another important factor according to Union Pacific is the expansion of the Panama Canal (the third set of Locks Project) which is a project proposed by the Panama Canal Authority (PCA) that will double the capacity of the Canal by 2014 allowing larger ships to transit and making the movement of goods coming from the west cheaper. Although the UPRR's decision of not to participate in the project means Yuma County will no longer be considered for the project because Union Pacific owns all existing rail lines in the area and does not allow another railroad to use their tracks, the reactivation of the project through a Metropolitan Planning Organization (MPO), municipality or the construction of a short line railway by a private company should not be discarded.

Rail Freight and Passenger

The Union Pacific Railroad (UPRR) and AMTRAK provide east-west rail freight and passenger service, respectively. Runways for the Marine Corps Air Station are also used by the Yuma International Airport, offering additional capacity as an air passenger and freight terminal. This strategic location and infrastructure gives Yuma the potential for continued economic growth and the ability to take full advantage of the North American Free Trade Agreement (NAFTA) including opportunities for an inland port.

The Union Pacific Railroad handles all freight rail operations in the Yuma area. Yuma is situated along the Union Pacific Railroad's primary east-west freight corridor known as the Sunset Route. The Sunset Route handles as many as 70 trains per day. This all-weather freight corridor links the Port of Los Angeles in California with the Port of Houston in Texas. These two ports are the two largest shipping volume, inter-modal, deepwater ports in the United States. The majority of imported and exported goods consumed or produced in the United States passes through these two ports.

Industrial growth along the US/Mexican border region has been influenced by NAFTA and has increased the amount of freight traffic along the border region. Current US/Mexican rail freight traffic in the west moves through the ports of entry at Nogales, Sonora and Mexicali, Baja California. Rail freight through the Port of Entry at Nogales, Sonora is primarily manufactured goods, cement, and copper concentrates from central Sonora. Additionally, intermodal container freight from the deepwater Port of Guaymas, Sonora is increasing as well. Freight rail trains from Guaymas along the Nogales branch of the Union Pacific Railroad has increased significantly since 1993.

Freight along the United States/Mexico border near Yuma enters at the Port of San Luis, approximately 25 miles south of Yuma. Freight is exported and imported through the region primarily by truck. Food and electrical equipment imports have generally increased in recent years. Produce from northwest Sonora supplies much of the United States' market during the winter months. Additionally, produce is grown year-round in northwest Sonora and the Yuma Valley, and shipments continue year-round. Electrical equipment from the "maquiladoras"⁽¹⁾ in San Luis Rio Colorado, Sonora is shipped through the port of entry at San Luis.

AMTRAK operates three passenger trains in each direction that travel between Los Angeles, California and Orlando, Florida on a weekly basis. The trains stop in Yuma at the Amtrak station (281 Gila Street). There are no services provided at the station. Of the eight Arizona stations served by AMTRAK, Yuma was the seventh busiest in 2010, boarding or detraining an average of approximately ten passengers daily⁽²⁾.

¹A "maquiladora" is a Mexican Corporation which operates under a **maquila** program approved for it by the Mexican Secretariat of Commerce and Industrial Development (SECOFI).

²AMTRAK fact sheet, FY2010, State of Arizona

Circulation Element - Railway Network



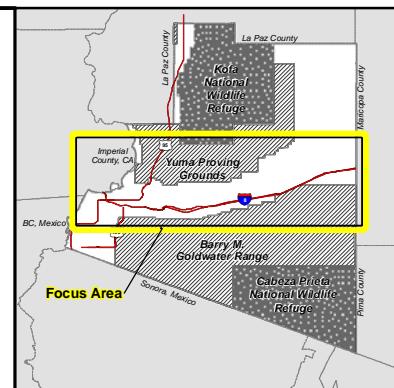
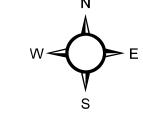
- Union Pacific Sunset Route
- Yuma Valley Railroad Section
- McElhaney Cattle Company
- Wellton Branch (Inactive)

- Military Boundary
- Incorporated Areas

For Information Only, No Liability Assumed.
Source: Yuma County Dept. of Development Services
Yuma County GIS Division

Date: July, 2011

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6.5 Aviation Network

Yuma's history of flight dates to 1911 when Robert Fowler took off from Yuma to set a world record for endurance and distance. Fowler entered a transcontinental air competition sponsored by William Randolph Hearst and landed in Yuma on October 25, 1911 as part of the transcontinental trip. Over 2,000 spectators watched the aircraft land. The next day he succeeded in setting a world record by reaching Florida.

Afterward, in 1925, the Yuma Chamber of Commerce (YCC) went to work to secure an airport for Yuma. Forty acres of land were acquired from the federal government. Afterwards, the Chamber's Aviation Committee decided another 160 acres was needed to create a first-class landing field in Yuma. Another 640 acres of government land were leased to Yuma County with the support of a Yuma Aviation Bill signed on February 27, 1928. In June of that year, the military announced that a United States meteorological and aeronautical station would be constructed and would be manned by four army personnel, marking the first military presence at Yuma's airport.

The outbreak of World War II transformed the civilian airport into the Yuma Army Airfield. Construction of facilities began on June 1, 1942 and was activated on December 15 of the same year. The base was closed on November 1, 1945. After the war, the airfield was turned over to the Department of the Interior as a headquarters for the Bureau of Land Reclamation.

On January 1, 1954, Yuma County Airport was reactivated by the United States Air Force's Air Defense Command as a training facility. The Yuma County Airport was re-designated Yuma Air Force Base. Later on it was renamed as Vincent Air Force Base and transferred to the Navy on January 1, 1959. Finally, on July 20, 1962, the base designation was changed to its current designation as Marine Corps Air Station-Yuma (MCAS)⁽¹⁾.

MCAS-Yuma is currently the busiest air station in the Marine Corps, offering excellent year-round flying conditions and thousands of acres of open terrain for air-to-ground weapons ranges and associated restricted air-space for military flight operations.



Photo Credit: Lockheed Martin

(1) MCAS Yuma is currently programmed to become the Marine Corps' initial operating base for the F-35B variant of the F-35 Lightning II Joint Strike Fighter.

Yuma International Airport

The Yuma International Airport is managed and operated by the Yuma County Airport Authority, Inc. (YCAA). Under Arizona Statutes, a state “Airport Authority” is an independent public agency and a non-profit organization. The YCAA leases the airport’s land from Yuma County on a fifty year lease that currently continues through December 2057.



Photo credit: www.holbrookelectric.com

The YCAA has two commercial passenger airlines: United Airlines through United Express, and US Airways through US Airway Express providing service to Los Angeles International Airport (LAX) and Phoenix Sky Harbor Airport (PHX)⁽¹⁾.

The Airport also has two fixed base operators (FBOs) that provide services to general areas (GA) of aircraft operators such as aircraft fueling, maintenance, storage, light aircraft maintenance, rental car arrangements and catering services. The FBOs currently operating at the Airport are Care Flight Aviation Center, and Million Air Jet Center. Additional aircraft storage hangars, including box hangars, T-hangars, and T-shades for rental and a complimentary wash rack are available for use by base aircraft owners⁽¹⁾.

Airstrips

An airstrip or airfield is a kind of airport that consists only of a runway with perhaps fueling equipment. They are generally in remote locations and often used for agricultural purposes. Some airstrips and airfields in Yuma County are abandoned, but some of the active ones are used in a limited capacity privately or by the military. Table 6 below lists the airports and airfields in Yuma County.

Table 6: Airports and Airfields in Yuma County

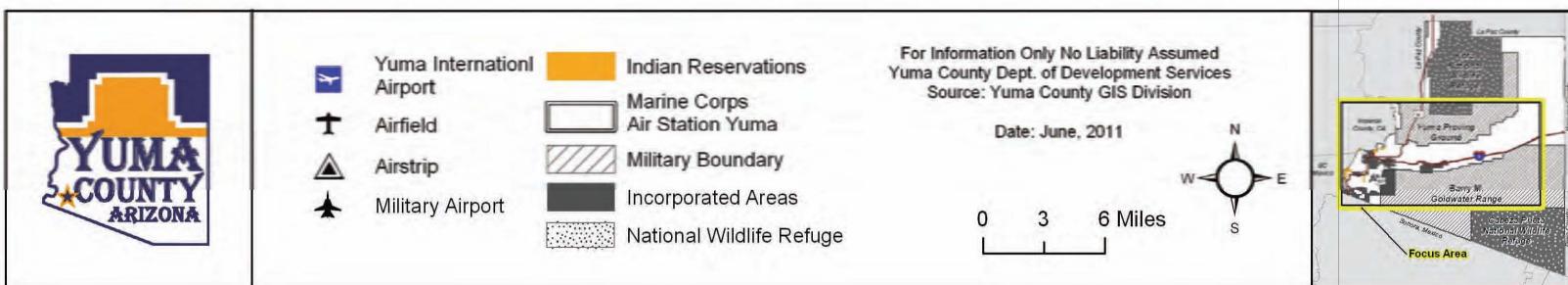
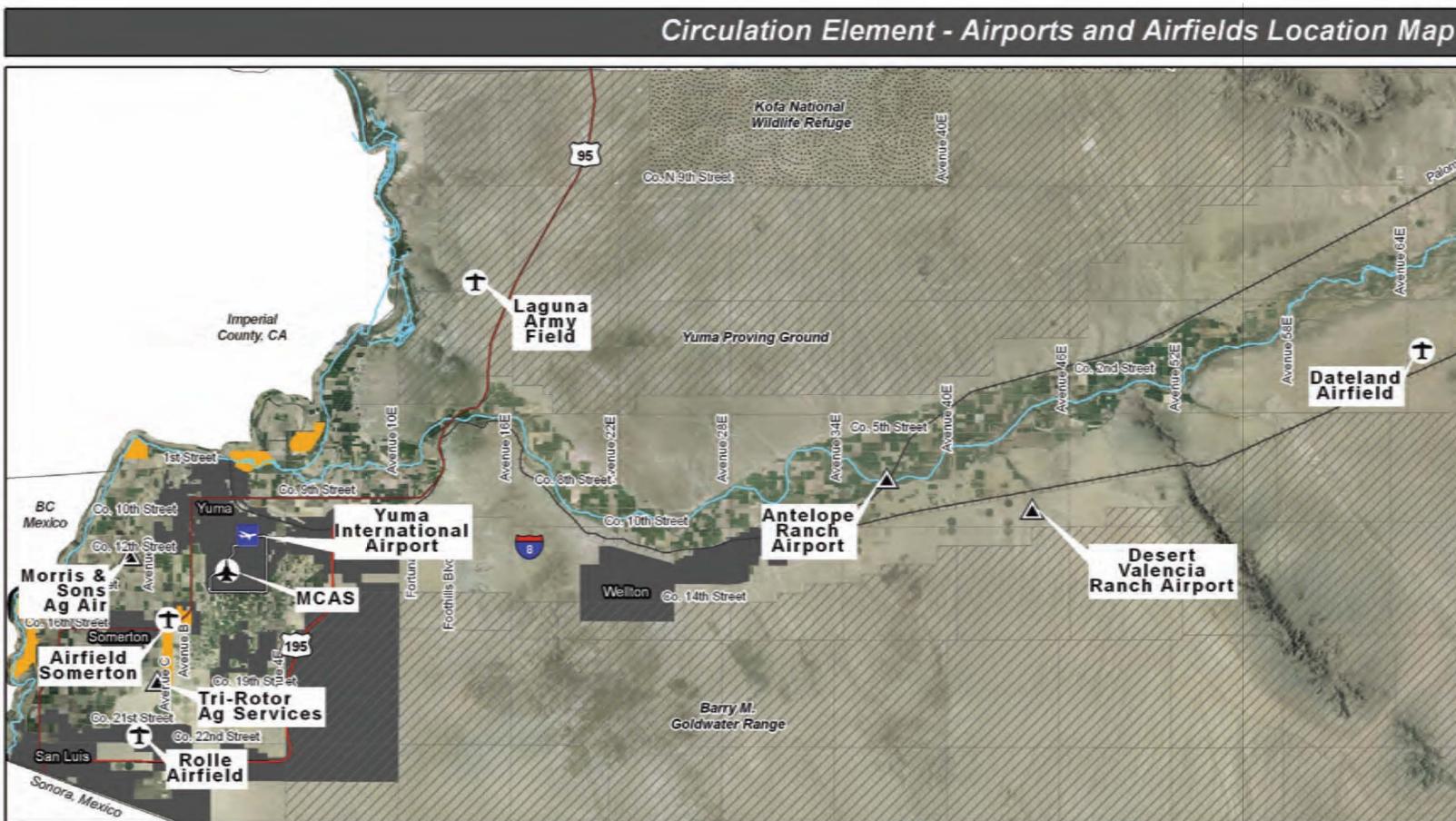
Name	Location	Aircraft Operations	Number of Runways	Use Ownership
MCAS/Yuma International Airport	<i>6 miles from Yuma Center</i>	211,236 (2010)	4	Military/Public
Rolle Airfield	<i>5 miles from San Luis</i>	3,050	1	Public
Somerton Airport	<i>3 miles from Somerton</i>	100	3	Private
Laguna Army Airfield	<i>Yuma Proving Ground</i>	Unknown	2	Military
Antelope Ranch Airport	<i>4 miles NE of Tacna</i>	Unknown	Unknown	Private
Desert Valencia Ranch Airport	<i>4 miles E of Tacna</i>	Unknown	Unknown	Private
Dateland Airfield	<i>Dateland</i>	Unknown	Unknown	Private
Auxiliary Airfield-2 (Aux-2)	<i>Barry M. Goldwater Range</i>	Unknown	1	Military Training Only
Morris and Sons AG Air	<i>6277 W County 12th Street, Yuma</i>	Unknown	1	Private
Tri-Rotor Ag Service	<i>18679 S. Avenue D, Yuma</i>	Unknown	1	Private

Table 6: Airports and Airfields in Yuma County

(1) www.yumainternationalairport.com

Yuma County 2020 Comprehensive Plan

Map 5: Airports and Airfield Location Map



Circulation Element

Airport Roadways

Interstate 8 is the east-west corridor from Yuma toward San Diego to the west and toward Phoenix to the northeast. The airport is located in the southern portion of the City of Yuma and is accessible via Highway 95 or Interstate 8 from the downtown area. The Airport is bordered by:

- East 32nd Street / Highway 80 / County 11th Street to the north
- Avenue 3E to the east
- County 14th Street to the south and
- various roads, including 4th Avenue, Avenue 1E (Arizona Avenue) and 40th Street

The on-Airport terminal loop roadway off 32nd Street and Pacific Avenue to the north of the passenger terminal connects the terminal curb-front, various parking areas and rental car facilities and serves as the link between the regional highway system and the terminal area.

Yuma International Airport Master Plan

The goal of an Airport Master Plan is to provide guidelines for future airport development that is financially, technically and environmentally feasible. The National Environmental Policy Act of 1969 and Federal Aviation Administration (FAA) Order 5050.4B, *National Environmental Policy Act (NEPA) Implementing Instructions for Airport Actions*, provides guidance on evaluating environmental impacts when implementing actions at public-use airports.

Three categories of environmental analysis and review relevant to airport development are outlined in NEPA. Projects proposed for implementation by an airport operator and subject to NEPA review are assessed based on their potential to cause significant environmental impacts. The three categories of environmental review are:

- **Categorical Exclusions** – Projects that are categorically excluded have been found to have no potential for significant environmental impacts under normal circumstances.
- **Actions Normally Requiring an Environmental Assessment (EA)** – Projects normally requiring an EA are those that have been found through experience to sometimes have significant environmental impacts.
- **Actions Normally Requiring an Environmental Impact Statement (EIS)** – Major actions that will significantly affect the environment must be assessed in an EIS. In addition, if an EA determines that a project will have significant impacts, the FAA will prepare an EIS to further investigate the project's potential environmental impacts.

The major product of the master planning process is the Airport Layout Plan (ALP), which shows the existing and ultimate planned development through the planning horizon. Federal aviation regulations require that an airport operator submit environmental review documentation of the planned development for FAA review and approval if the airport operator plans to

Aircraft Noise

Aircraft noise originates from both the engines and the airframe of an aircraft, but the engines are by far the most significant source of aircraft noise. Although noise from propeller-driven aircraft (mostly commuter and general aviation aircraft) can be annoying, the primary source of disturbing noise from the airport is jet aircraft. Because none of the proposed Airport Development Plan (ADP) projects are airfield capacity projects, a detailed noise analysis was not completed as part of the Master Plan Update. The Department of Defense is currently in the process of preparing an EIS to evaluate the impacts of basing the Joint Strike Fighter aircraft at MCAS-Yuma. As part of that EIS a detailed noise analysis for MCAS-Yuma and the Airport will be completed.

Compatible Land Use

Federal agencies have adopted guidelines for compatible land uses and environmental sound levels in airport areas. Land use is normally determined by zoning codes such as residential, industrial or commercial. Based on extensive research on the effects of noise on people, noise levels that are incompatible with residential land uses may be compatible with industrial or commercial land uses. The FAA has identified land use compatibility guidelines relating types of land uses to aircraft noise levels. Arizona Revised Statutes (ARS) 28-8461 provides definition relating to airport zoning and regulations while ARS 28-8481 lists military airport operation compatibility, compliance procedures, and land use matrix.

Part 150 of the Federal Aviation Regulation , *Airport Noise Compatibility Planning*, sets forth compatibility guidelines for residential, public, commercial, manufacturing and recreational land uses. Land adjacent to the airport boundary is categorized as Airport Area Specific Plan commercial, industrial, business park or recreational/open space land use. The City of Yuma and Yuma County⁽¹⁾ have also identified and adopted a Runway Approach Departure Safety Area/Airport Industrial Overlay District (RADSA/AIOD) for the approaches to Runway 8-26. The Department of Defense has identified Clear Zones and Accident Potential Zones (APZ) as part of its Air Installation Compatible Use Zone (AICUZ) Study for MCAS Yuma.

No development proposed as part of the ADP would occur adjacent to any existing residential or noise sensitive areas. All proposed ADP projects would occur within the current Airport property, and no changes to the airfield would significantly affect the areas exposed to aircraft noise off airport property. Portions of the proposed taxiway parallel to Runway 3L-21R would traverse the APZ for the runway; however, taxiway development is considered compatible with an APZ. Therefore, implementation of the ADP projects would be consistent with planned land uses and is not anticipated to affect compatible land use.

Social Impacts

Aviation development affects not only the natural environment but also the human environment. Therefore, consideration of social impacts is required to determine the potential effects of airport development on the human environment. The types of impacts considered in this overview that could result from airport development include:

⁽¹⁾City of Yuma and Yuma County, *Joint Land Use Plan, Land Use Element Amendment, City of Yuma General Plan, Yuma County Comprehensive Plan*, <http://www.yumacountyaz.gov>

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- Disproportionately high and adverse human health or environmental effects on minority and low-income populations
- Disproportionate health and safety risks to children
- Relocation of residences and/or businesses
- Disruption of communities
- Alterations in traffic patterns that may permanently or temporarily restrict traditional community access
- Substantial loss in community tax base

All proposed ADP projects would be implemented on existing airport property and would not require the relocation of residences or businesses or cause community disruption. Because no residential areas are located adjacent to the areas where projects are proposed, no disproportionate effects are anticipated on minority and low-income populations or to health and safety risks for children.

Section 4(f) of the Department of Transportation Act of 1966 specifies that transportation projects cannot take land from public parks, historic sites or wildlife refuges without first determining that there is no reasonable and prudent alternative. Takings can include the physical acquisition of lands or significant noise or air pollution impacts to such lands so as to make the lands unsuitable for their desired use.

Preservation of prime farmland is a priority goal for the U.S. Department of Agriculture and the sponsors of projects with federal support are required to assess the projects' effects on prime farmland. The ADP projects would be implemented completely within the airport property boundary. Implementation of the ADP projects would not affect farmland.

Off-Airport Land Use and Zoning

Off-Airport land uses in the vicinity of the airport are predominantly residential, agricultural and commercial. The airport lies within the city limits of the City of Yuma and has planning areas within its immediate environs. The goal within the South Mesa Sub-Regional Planning Area is to preserve and promote agricultural lands and activities as well as low-density housing. Land use within the North Gila Valley and Yuma Valley Sub-Regional Planning Area is predominately agricultural.

6.6 Visual Corridors

Visual corridors are defined as historic, scenic, gateway or aesthetically pleasing routes that help define the character of Yuma County. A visual corridor can have a variety of characteristics, but primarily they provide vistas of mountains or show important cultural and historic resources. Visual routes also provide visitors their first lasting impression of Yuma and should leave travelers with an aesthetically pleasing experience.

Visual corridors promote putting restrictions on development of marginal lands and mountainous areas of the county in order to maintain rural character. Heavy industrial development should be discouraged and stricter sign regulations applied along these routes. The following is a list of road segments classified as visual corridors. Refer to the Visual Corridors map to see segments of these roads that are designated as visual corridors.

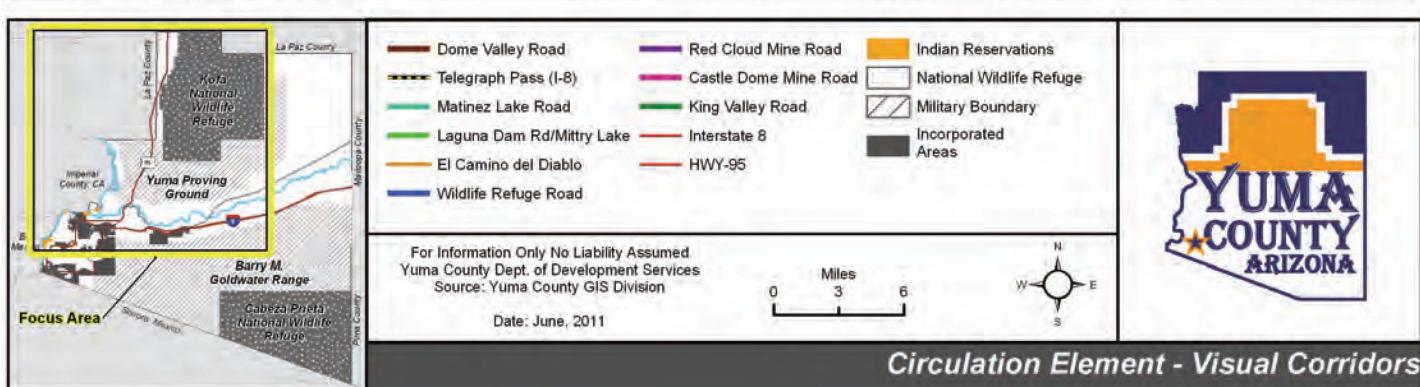
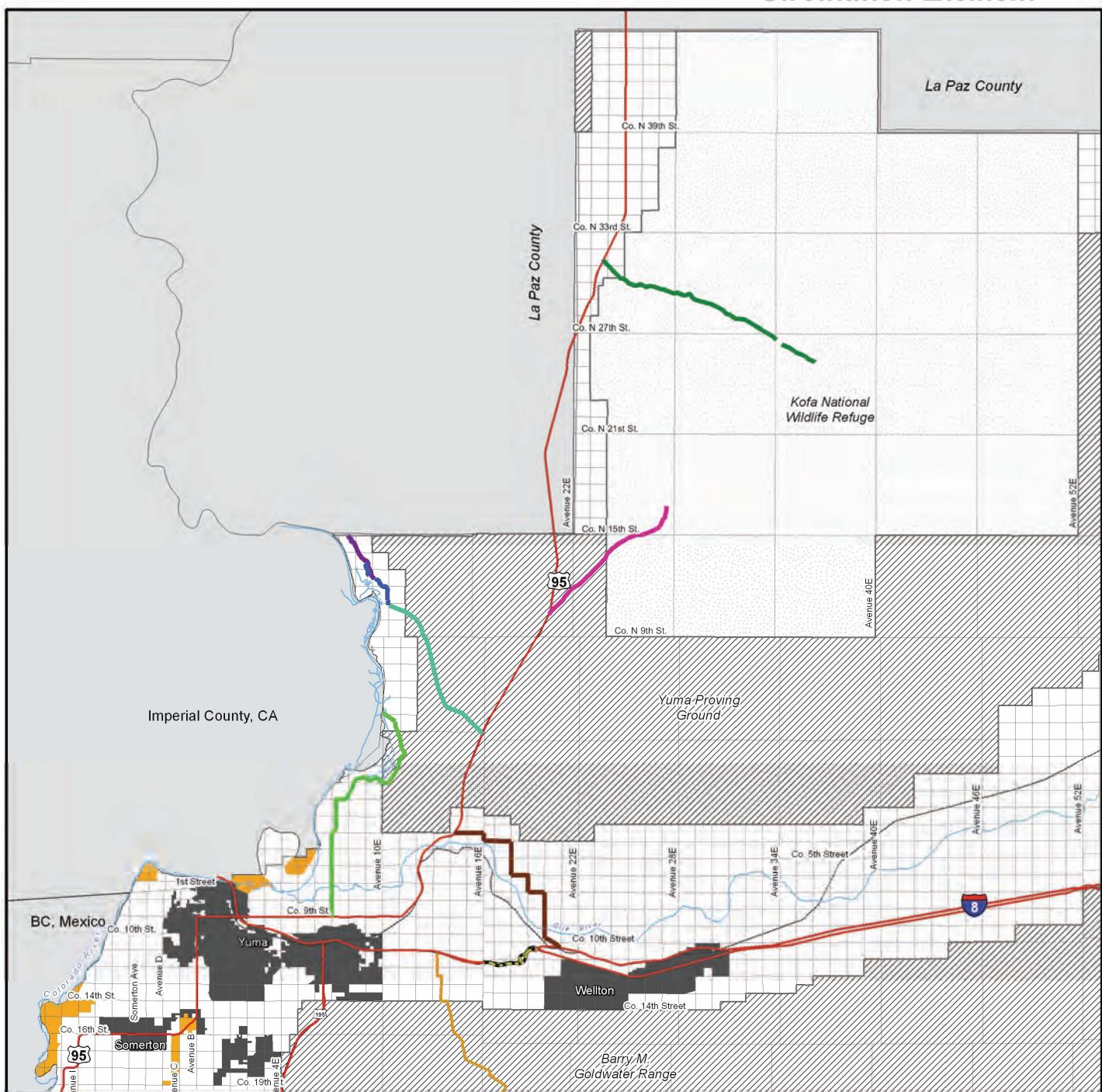
- U.S. Highway 95
- Dome Valley Road
- Telegraph Pass (I-8)
- Laguna Dam Road/Mittry Lake
- El Camino del Diablo
- Martinez Lake Road
- Wildlife Refuge Road
- Red Cloud Mine Road
- Castle Dome Mine Road
- King Valley Road
- Mohawk Pass (I-8)

The Yuma County Zoning Ordinance contains a Visual Corridor Overlay (VCOD) District which can be applied to ensure that lands adjacent or contiguous to Visual Corridors are developed in a manner that preserves, enhances and is in harmony with the natural scenic beauty and rural character viewed by travelers on the corridors. Further, the VCOD District is intended to mitigate potential adverse impacts on the Visual Corridors by adjacent or contiguous land uses. Ensuring the buffering and screening of uses will in turn contribute to and enhance trade, tourism, capital investment and the community's general welfare. Visual Corridor Development Standards are to be applied to areas identified as Visual Corridors in the adopted Comprehensive Plan.



Photo credit: Yuma county, DDS, Planning Section

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6.7 Circulation Policies and Priorities

- CPP.1:** Yuma County will support those plans adopted by the YMPO Executive Committee as directed by Board Of Supervisors.
- CPP.2:** Yuma County will support the plans adopted by the Yuma County Airport Authority and Arizona Department of Transportation as directed by Yuma County Board of Supervisors
- CPP.3:** Yuma County will maintain a close working relationship with appropriate federal, state, military transportation and aviation management agencies in developing transportation plans.
- CPP.4:** Yuma County will encourage the coordination of public and private transportation programs and facilities that accommodate increased road traffic volumes and capacities.
- CPP.5:** Yuma County will give priority to those transportation projects commensurate with land use designations.
- CPP.6:** Yuma County will continue to require the private sector to bear its share of road improvement financing.
- CPP.7:** Yuma County will encourage new development to occur where existing transportation facilities are adequate or where necessary improvements will be made as part of the development project.
- CPP.8:** Yuma County will encourage efficient multi-modal and alternative modes of transportation based on regional needs that are coordinated with jurisdictional plans.
- CPP.9:** Yuma County will encourage the reduction of private automobile usage and promote the use of public or multi-modal transportation facilities.
- CPP.10:** Yuma County will advocate development of Recreational Vehicle and Manufactured Home Parks that reflect access to multi-modal or alternative transportation systems.
- CPP.11:** Yuma County will encourage road design, construction or reconstruction to better accommodate pedestrian and bicycle traffic.
- CPP.12:** Yuma County will promote Best Management Practices that reduce PM₁₀ and ozone emissions.
- CPP.13:** Yuma County will advance the use of all modes of travel that contribute to clean air and energy efficiency.
- CPP.14:** Yuma County will encourage traffic conditions at County road intersections with stable flows or better.
- CPP.15:** Yuma County will encourage methods of protecting and enhancing the scenic qualities of land uses within corridor boundaries which must be devised and carried out.
- CPP.16:** Yuma County should consider designating local scenic highway routes, where appropriate, throughout the County following State guidelines.
- CPP.17:** Yuma County will use standards for corridor protection parallel to those established by the State.

6.8 Circulation Actions

- CA.1:** Yuma County will require that the impact of proposed developments on the existing roadway system be evaluated prior to approval.
- CA.2:** Yuma County will recommend transportation projects that minimize conflicts between incompatible land uses.
- CA.3:** Yuma County will investigate alternative funding sources and obtain equitable fair share contributions from the development community.
- CA.4:** Yuma County will provide environmentally sensitive transportation systems and future roadway networks.
- CA.5:** Yuma County will design and construct new county roads to minimize the adverse impact on water quality, sensitive area and resource lands, natural drainage ways and aesthetics.
- CA.6:** Yuma County will adopt guidelines to protect and plan for designated visual corridors.
- CA.7:** Yuma County will reduce PM₁₀ and ozone emissions.
- CA.8:** Yuma County will assist unincorporated communities in improving their transportation systems.
- CA.9:** Yuma County will conduct an in-depth assessment of the rural transportation deficiencies in unincorporated communities.
- CA.10:** Yuma County will develop design standards which provide for visual corridors, multimodal, environmentally sustainable and improved rural transportation systems.
- CA.11:** Yuma County will enforce driveway access point restrictions and provide for traffic flow improvements.
- CA.12:** Yuma County will incorporate road network designs that discourage non-residential or non-local traffic away from residential areas.
- CA.13:** Yuma County will develop criteria to foster the use of shared parking.
- CA.14:** Yuma County will signalize intersections properly.
- CA.15:** Yuma County will preserve and safeguard scenic routes in the County